MINIMAL ENGLISH FOR A GLOBAL WORLD

IMPROVED COMMUNICATION USING FEWER WORDS

EDITED BY CLIFF GODDARD

Minimal English for a Global World

'What should be an effective and equitable communication order for our world? The established pattern of global communication reflects a largely superseded world of national economies contained within secure territorial boundaries, and validated by authorised national cultures. These stabilities of territory, economy and culture may always have been illusory but vast population mobility and widespread transnational connections today have seriously eroded the inherited pattern of global affairs. This important volume proposes a unique addition to the usual answers to this question: Minimal English, in addition multilingualism and English as a Lingua Franca. This volume is an important instalment in the conversation we must all have about how we talk to each other in our topsy-turvy world. It shows the unique contribution that intercultural semantic analysis can offer to discussions about global communication. Combining insights from diplomacy, law, science and medicine with intercultural and linguistic analysis reveals new angles and prospects to thinking about the emerging communication system.'

—Joseph Lo Bianco, *University of Melbourne, Australia*

'This is a timely, important, and significant contribution to our knowledge of meaning and language. It is timely because everywhere, we are finding that differences of meaning are active even when people use the same scripts of the same language; it is important because the approach in the book offers clarity for understanding those differences (as well as the commonalities); it is significant because the more enhanced understanding we are able to develop in uses of language and its various meanings, constructive paths to social betterment can be cleared – not always followed, but cleared if possible. This is a fine book for linguists, anthropologists, communication scholars, interculturalists, and others interested in addressing and developing these issues.'

—Donal Carbaugh, *University of Massachusetts Amherst, USA*

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Editor

Minimal English for a Global World

Improved Communication Using Fewer Words

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Anna Wierzbicka born and educated in Poland, is Professor of Linguistics at the Australian National University. Together with Cliff Goddard, Wierzbicka created the "Natural Semantic Metalanguage", based on empirical cross-linguistic investigations, which can serve as a basis for comparing meanings across languages and cultures. Her latest books are *Imprisoned in English: The Hazards of English as a Default Language* (2014 OUP) and (with Cliff Goddard) *Words and Meanings: Lexical Semantics Across Domains, Languages, and Cultures* (2014 OUP).

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1

Introduction

Cliff Goddard

There are a great many books, conferences, articles, and the like on the topic of "Global English". This book, however, is unique in linking the theme of Global English with that of Minimal English as a tool for achieving better intercultural understanding and clearer thinking. Although the idea of Minimal English, that is, an identifiable core of simple, cross-translatable English words, comes from linguists, many of the contributors to this book are not linguists. They are experts and specialists from the fields of diplomacy and international relations, ethics and law, science education, public communication, and medicine, all of whom are entering into an interdisciplinary dialogue with outward-looking linguists. The reader will find a variety of different voices and styles, reflecting different fields and vantage points of the contributors. The chapters, many of them beautifully written, tell us not only about the potential for Minimal English in their respective fields but are richly informative about those fields themselves. Not that these chapters deal in

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generalities. One of their most appealing aspects is that the authors use concrete case studies.

But what is Minimal English, and how does it relate to ordinary English and to Global English, that is, English as a global lingua franca? The concept of Minimal English was first proposed by Anna Wierzbicka (2014: Ch 14), as a radically reduced "mini English" which can provide "a common auxiliary inter-language for speakers of different languages, and as a global means for clarifying, elucidating, storing and comparing ideas" (p. 194). This idea is taken up in Chap. 2, by Cliff Goddard and Anna Wierzbicka. Aside from arguing for the benefits of using cross-translatable words, they stress that Minimal English is intended not to replace or supplant ordinary English, but to add to its effectiveness as a global tool for communication and discourse. The linguistic research and knowledge base underlying it is dealt with in Chap. 3 by Cliff Goddard, "Minimal English: The Science Behind It". Most of the subsequent chapters include texts written in Minimal English, some of them lengthy.

The next two chapters take us into the world of diplomacy and international relations, where communication is often a sensitive and tricky business. William Maley's Chap. 4 illustrates the pitfalls and complexities of diplomatic communication, particularly in crisis situations, while in Chap. 5 Nicholas Farrelly and Michael Wesley discuss the roles of English in international relations, with a particular focus on ASEAN and on China–US relations. These authors see real value in having an auxiliary form of simple cross-translatable English at hand.

Chapters 6 and 7 are, broadly speaking, about ethics, values, and law. Anna Wierzbicka proposes a "Charter of Global Ethic" written entirely in Minimal English, and discusses the great advantages of freeing international discourse in this area from Anglocentric orientations that are hiding, often unnoticed, in untranslatable Anglo-English words. In her Chap. 7, Annabelle Mooney uses Minimal English to tease out the core elements of the concepts of "torture" and "cruel, inhuman and degrading treatment" in international law.

Minimal English clearly has important potential applications in education. In their respective Chaps. 8 and 9, Anna Wierzbicka and David Christian

explore how Minimal English can contribute to science education and to Big History. Anna Wierzbicka takes as her case study the story of changing ideas about the universe, from Ptolemy, through Copernicus, Galileo, and into modern times. How can this canonical science story, she asks, be captured and taught to children "through words that children can understand". In Chap. 9, David Christian, the founder of the Big History movement (which, broadly speaking, seeks to tell the shared history of humanity in the context of the universe), discusses the need for origin stories and the challenge of casting such stories into language which is both precise and accessible.

The final pair of chapters are only loosely connected in terms of subject matter, but both are concerned with in-progress applications of Minimal languages—not Minimal English as such, but its parallels in other languages, such as Finnish, Italian, and French. Chapter 10, by Ulla Vanhatalo and Juhana Torkki, relates how the authors have popularized in Finland the idea of improving communication using the semantic primes of Finnish, the "65 words" method. The final chapter, Chap. 11, is about health communication, specifically, efforts being made in the "narrative medicine" approach to improve communication between patients and doctors and to give patients a stronger voice. The authors are linguist Bert Peeters and narrative medicine expert Maria Giulia Marini.

Clearly each of the chapters can deal with only a small cross-section of the issues in their respective fields, but cumulatively they show the enormous potential for Minimal English to make a difference in the world.

It goes without saying that there is much which is not included, or even touched on, in this book, including the applications of Minimal English in language teaching and language learning, in higher education, in linguistic fieldwork, and in counselling, mediation, and therapy. All going well, there will be time and opportunity for these topics in future books, conferences and websites.

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Reference

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2

Minimal English and How It Can Add to Global English

Cliff Goddard and Anna Wierzbicka

2.1 Why Minimal English?

The global spread of English is now something that concerns millions of people, in fact, mega-millions, and it creates challenges that, we believe, cross-linguistic semantics has something useful to say about. One of the goals of this book is to bring the experience of cross-linguistic semantics, that is, the study of meaning across languages, into the public arena and to discuss ways in which it can be helpful in fostering clarity in intercultural communication. Underlying it is the idea that Global English is not an unmixed blessing as far as intercultural understanding is concerned. Yes, Global English facilitates international and intercultural communication—but it can also create an impression that effective intercultural understanding is occurring when in fact it is not. In his

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Cultures in Conversation, Carbaugh (2005: xxii–xxiii) referred to difficulties like these as 'invisible misunderstandings' (cf. Peeters forthcoming/2018). This book explores ways in which the use of Minimal English can improve intercultural communication and cross-linguistic understanding in the era of Global English.

2.2 What Is Minimal English?

Minimal English is an application and extension of several decades of research by linguists in the Natural Semantic Metalanguage (NSM) approach to meaning and language. Among linguists, the NSM approach is well known for its claim to have discovered the fundamental meaning elements of all languages, known as semantic primes, and for producing a large body of studies into how meanings are expressed differently through the words and grammars of different languages (Goddard and Wierzbicka 2014; more detail is given in Chap. 3, this volume). It is also—so far—the only comprehensive approach to linguistic description that takes an explicit stand against Anglocentrism (Wierzbicka 2014). But although based on extensive research by linguists working in the NSM approach, Minimal English is not NSM. It is very different in its purpose and, correspondingly, its composition.

Minimal English is intended for use by non-specialists, and for a wide and open-ended range of functions. It is the result of taking NSM research 'out of the lab', so to speak, and into the wider world—not as the sole language of communication, but as an auxiliary or supplementary language. Minimal English is a tool that can help people put their thoughts into words in a way that makes it easier to discuss them across a language barrier. (Actually, a better metaphor is that Minimal English offers a way of going 'under' a language barrier.) Minimal English also helps one to think more clearly. With fewer words to choose from, one is forced to focus on the essential things that one wants to say, without getting distracted by all the available lexical options or being tempted into vague and woolly phrasing. In a Minimal English text, every word matters, every word counts. This helps counter the vagueness that often comes with an 'inflated style', in which, as George Orwell (1946) once

put it: 'A mass of Latin words falls upon the facts like soft snow, blurring the outline and covering up all the details'.

In principle, the idea behind Minimal English is simple: to draw on linguistic research so as to speak in universal, near-universal, or widely known words using simple grammatical patterns that are known to be easily transposable into other languages (and conversely, to steer clear of known zones of lexical and grammatical trouble). This might sound like the familiar advice to 'Use plain language', and in a sense it is—but what is impressionistically 'plain' in English isn't necessarily either simple or universal. For example, the words *wrong*, *fair*, *friendly*, and *fact* sound pretty plain and simple to most English speakers, but they lack equivalents in very many languages. Likewise, in the area of grammar, a sentence like *We have to do something about it* sounds as if it uses a very simple sentence pattern, but there are many languages of the world into which it cannot be rendered without substantial rewording or grammatical rearrangement (see Chap. 2). Hence the value of the Minimal English project: it provides informed guidelines and guidance, based on linguistic research, about how to say important things in a clear and translatable way.

Needless to say, in the world of scholarship there are several research traditions, especially in the ethnography of communication, intercultural communication studies, hermeneutics, ethnolinguistics, and some strands of discourse studies, sociolinguistics, and applied linguistics, which recognize that communication is deeply 'culturally shaped' (cf., e.g. Hymes 1968; Carbaugh 2005, 2017; Underhill 2012; Sharifian 2011). Issues of (non)translatability, the importance of cultural words, and the possibility of cross-cultural misunderstanding (even within a 'common language') are common themes in these research literatures. Across an even broader ranges of fields, there are numbers of scholars who recognize the dangers of Anglocentrism (see the review in Wierzbicka 2014: Chaps. 15–18). The question is: What to do about it? Minimal English offers a new analytical tool and a new medium for practitioners in intercultural education.

Briefly, the starting vocabulary of Minimal English consists of (i) semantic primes and some associated grammatical words, (ii) words with special importance as semantic building blocks in other concepts, either

in all or most languages, and (iii) other useful words that are known to be either more or less cross-translatable or more or less unavoidable in many contexts of modern, international discourse, for example, *sea*, *book*, *buy*, *country*, *government*, and *number*. If any of them are unfamiliar in a given context, they may have to be explained, sufficiently for the purpose at hand, as they are introduced into the discourse. Altogether, we are looking at a core Minimal English lexicon of about 250 words, plus guidelines for how it can be expanded to meet the needs of particular situations.

2.3 Minimal English, Anglo English, Global English

The notion of Minimal English is contrastive. It presupposes a distinction between several forms of English: Global English, which is anchored in Anglo English, as opposed to Minimal English. Global English has been shaped by the history and culture of one particular part of the world, and still bears the imprints of its origins. Minimal English is derived from English, but being radically reduced, it can match the shared core of all languages. It has been built not only by systematic reduction of English but also by decades of empirical cross-linguistic investigations, aimed at identifying that common core; see Chap. 3. Accordingly, Minimal English is not another simplified version of English analogous to Ogden's (1930) 'Basic English' or Jean-Paul Nerrière's (2004) 'Globish'. Both of these versions of simplified English were pruned for practical purposes, but they were not reduced to the bare essentials, nor were they devised with cross-translatability in mind. In fact Ogden and Nerrière were not looking at English from a cross-linguistic perspective at all. Ogden's (1930) 850-word Basic included many quintessentially Anglo-English words that lack equivalents in other languages, including *experience*, *organisation*, *suggestion*, *humour*, *competition*, and *fiction*. Globish's 1500 words include hundreds of untranslatable English words, including *fair*, *right*, *wrong*, *mind*, *evidence*, and *experience*. See Sect. 6 for more detail.

Given its skeletal lexicon, Minimal English cannot of course be an all-purpose practical global means of communication. It can be, however, a global minimal lingua franca for the elucidation of ideas and explanation

of meanings—not only in scholarship but also in international relations, politics, business, law, ethics, education, and indeed in any context where it is important to explain precisely what one means.

In his introduction to a volume entitled *Universals of Human Thought*, philosopher Ernest Gellner (1981) wrote: 'Unconvertible currencies are not suitable for trade'. A key characteristic of Minimal English is that (unlike Ogden's Basic or any other reduced form of English) it is fully convertible.

By contrasting Global English with Minimal English, we are not aiming at attaining some theoretical conceptual purity but at putting into practical use empirical findings about concepts that, evidence suggests, recur in a verifiable lexical form, in languages from all the continents of our planet. We are aiming to promote human understanding that can be shared globally, through simple words of intelligible, ordinary English. In an absolute sense, Minimal English has no privileged status: Minimal Spanish, Minimal Chinese, or Minimal Arabic would do just as well. But whether we like it or not, from a practical point of view Minimal English can be a particularly useful tool in the twenty-first century's globalizing world.

We are not, of course, proposing that a ban should be placed on complex Anglo-English concepts in scholarship, international discourse, and in education. That would not only be impractical but also counterproductive. There are tremendous advantages that come from having English as a global lingua franca. What we propose is that—in some contexts—it would be useful to problematize and denaturalize such English concepts and to try to think 'outside English'. When this needs to be done, Minimal English is a valuable tool.

2.4 Examples of Minimal English

What would this look like in practice? Here are three short examples 'sampled' from the later chapters in this book. In Chap. 6, Anna Wierzbicka makes the case that discourse about values and ethics is best carried out in terms that are cross-translatable and not invested from the beginning with a viewpoint which is tied to any particular language. She

proposes to distil key ethical ideas from the Christian, Buddhist, and humanist traditions into a 'Charter of Global Ethic' composed in Minimal English. To illustrate only from the negative side of the lexicon, this means avoiding both 'high' English words like *violence*, *racism*, and *prejudice* and Plain English words like *murder*, *rape*, and *hatred*.[1] We have extracted two of Wierzbicka's 24 proposed principles, from the section titled 'Bad ways of thinking about people'.

[A1] (Charter, item 5)
It is very bad if people think like this about some people:
"People of this kind are not like other people, they are below other people."

[A2] (Charter, item 8)
It is very bad if people think like this about people:
"People of many kinds live on Earth, people of some of these kinds are bad people"

These two mini-texts are phrased exclusively in semantic primes. Other items in the proposed Charter use some Minimal English words which are not semantic primes, such as 'kill' ('it is very bad if people want to kill other people') and 'men', 'women', and 'children'.

To show a more complex ethics text, we can look at the last of Wierzbicka's proposed principles, labelled here [A3]. Note the expression '(on) the Earth', a pivotal term for global consciousness.

[A3] (Charter item 24)
It is good if people think like this about the Earth: "Many people live on Earth now, many other people will live on Earth after. Very bad things can happen to these other people if people do some bad things on Earth now. I don't want these bad things to happen to these other people. Because of this, I don't want to do these things."

Turning from ethics to international relations and diplomacy, in Chap. 5 Nicholas Farrelly and Michael Wesley argue that Minimal English can contribute to meeting sometimes unrecognized communication problems in international affairs. Noting that assumed or apparent proficiency

in English is not always straightforward, they contend that a measure of simplification and codification of language can assist in the conduct of foreign relations. 'Success does not always require elegance', they write, 'but is built on the need to get words to carry their meanings across cultural boundaries'. They argue that even high-level diplomats can go astray by overlooking semantic nuances and cultural assumptions embedded in complex Anglo-English vocabulary. They illustrate with an extended study of calls from the US Bush administration in 2005 for China to become a 'responsible stakeholder in the international system'.

Their treatment is complex and cannot be summarized here, but we have extracted two mini-texts that show how Minimal English can be brought to bear to help clarify complex ideas such as 'international system' and the special responsibilities of major countries in international relations. Some readers might find these wordings embarrassingly 'simplistic'. If so, he or she is invited to experiment with other ways of putting the same basic ideas into words while avoiding expressions such as 'system', 'interests', 'mutual benefit', and 'responsibility', all of which are untranslatable into most languages of the world.

[B1] "International system"
Many countries on Earth are parts of one big something. If some of these countries do some things, this can be very good for all these countries. If some of these countries don't do some things, this can be very bad for all these countries.

[B2] "Big countries"
Some countries are not like many other countries because they are very big countries. America is one of these countries. China is one of these countries. […] it is good if a big country thinks like this at many times: "I am part of something, many other countries are parts of this something. I am a big part of this something. Because of this, if I do some things, this can be very bad for all these countries. Because of this I don't want to do these things."

Obviously, expressions such as 'countries' and 'on Earth' are crucial anchor points for the discourse, as are names such as 'America' and 'China', but it is also notable how much can be done with simple words

and expressions such as 'parts of one big something' and 'this can be very good (or: very bad) for all these countries'.

In Chaps. 8 and 9, Anna Wierzbicka and David Christian discuss whether and to what extent Minimal English can capture 'big ideas' for the purpose of history and science education. The following is an extract from a lengthy Minimal English text, presented in Chap. 8, telling how Western ideas about the Universe have developed over the centuries from Ptolemy, Copernicus, Galileo, and into modern times. Much of the material it covers is found in school textbooks as part of the canonical narrative of Western science. The extract in [C1] describes the importance of the telescope.

[C1] Galileo's telescope
Galileo looked at the stars not like other people looked at them before. Because of this, he could see them well, not like people could see them before. When he was looking at them, he was holding something of one kind near his eyes. When someone holds something of this kind near the eyes, this someone can look at some places very far from the place where this someone is. A thing of this kind is called "a telescope." When Galileo looked at the sky at night like this, he could see some places very far from the Earth well.

This passage uses no less than seven Minimal English words which are not semantic primes: 'stars', 'look at', 'hold', 'eyes', 'be called', 'sky', and 'night'. Elsewhere in the same text, other non-primitive words like 'the Sun', 'the Earth', and 'Moon' are used, as one would expect. A fine point—but a notable one—is that the wording in lines 1–2 avoids the untranslatable 'comparative construction'. It would have been easy to say that, using his telescope, Galileo could see the stars 'better' than other people before him, but some languages don't have 'comparative' words like 'better' ('bigger', 'faster', etc.) The mini-text in [C1] also shows how 'new' words, such as 'telescope', can be introduced as necessary by using the Minimal English expression 'is called'.

Jumping ahead in the 'Universe' passage discussed by Wierzbicka, the mini-text in [C2] tries to capture some pieces of astronomical common knowledge, derived from centuries of scientific inquiry.

[C2] Some pieces of modern astronomical "common knowledge"
Many people now know that it is like this: The Sun is a star. There are very many other stars like the Sun. […] The stars are very very big things, these things are very very far from the Earth. They are not touching anything else, like the Sun is not touching anything else. None of them is near another one, none of them is near anything else, like the Sun is not near anything else.

Whether, and to what extent, scientific facts and narratives can be rendered in Minimal English, and how such texts can be used in primary and early secondary education, and in cross-cultural contexts, is debated, constructively and productively, by Christian and Wierzbicka.

2.5 The Vocabulary of Minimal English

This section outlines the vocabulary of Minimal English as we see it at the present time. First things first, as the saying goes, and when it comes to simple cross-translatable words, this means starting with the most basic meanings of all: semantic primes. They are listed in Table 2.1 below. For people who are seeing this list for the first time, it may be helpful to make a few observations. First, it includes words from all broad divisions of the lexicon: substantives (noun-like words and pronouns, including indefinites like 'someone' and 'something'); the demonstrative 'this' and some other specifiers; some quantifying and descriptive words; words

Table 2.1 Semantic primes (English versions) grouped into 12 categories

1	I~me, you, someone, something~thing, people, body, kind, part
2	this, the same, other~else
3	one, two, much~many, little~few, some, all
4	good, bad, big, small
5	think, know, want, don't want, feel, see, hear
6	say, words, true
7	do, happen, move
8	be (somewhere), there is, be (someone/something), (is) mine
9	live, die
10	time~when, now, before, after, a long time, a short time, for some time, moment
11	place~where, here, above, below, far, near, side, inside, touch
12	not, maybe, can, because, if, very, more, like

from the areas of time and place; 'logical' words like 'if', 'can', 'because', and 'maybe'; and a fairly rich collection of verb-like words. The latter includes both experiential/subjective words ('want', 'don't want', 'think', 'know', 'feel', 'see', 'hear'), social ('say'), and objective ('happen', 'do', 'move'), as well as 'live' and 'die' and various stative verbs: 'be (somewhere)' [locational 'be'], 'be (someone/something)' [specificational 'be'], and 'there is' [existence]. On the other hand, the stock of semantic primes does not include many 'concrete' nouns (actually, 'body' is the only one) or verbs for physical activities or processes, and there are no words like 'and', 'but', or 'or' either.

There are 65 semantic primes, but because some of them occur in variant forms (allolexes) or are expressed in English phrasal expressions (such as 'a long time' and 'don't want'), the total number of words is greater than this. The primes also bring with them various grammatical words (also known to linguists as function words) associated with their combinatorial properties. For example:

'in', e.g. in this place, in the same place; in one moment
'at', e.g. at this time, at the same time; at this moment
'of', e.g. one of these people; one part of this thing; something of one kind
'with', e.g. do something with someone; live with someone; say something with words
'about', e.g. know about something; say something about someone
'that' (complementizer), e.g. I didn't know that this can happen
'to' (complementizer), e.g. I want you to do something
'it' (dummy subject), e.g. it is good if ..., it is bad if ...

All these grammatical words are features of Minimal *English*, and do not, of course, map one-to-one to the Minimal versions of other languages. In Minimal Finnish, for example, only three of the grammatical functions listed above would be marked by separate words. All the others are expressed using case suffixes (Vanhatalo et al. 2014).

Variant forms (allolexes) of semantic primes and portmanteau expressions (in which a single word stands for a combination of several words) are also part of the core vocabulary of Minimal English. Some appear in

Table 2.1, indicated with ~ (e.g. the word *else* is an English variant of *other*). In addition, there are the following:

'a lot' (a variant of 'much~many')
'well' (an adverbial variant of 'good')
'as', 'such', 'way' (variants of 'like', or portmanteau of 'like' and 'this')
'during' (variant of 'for …' about time periods)
'it' for 'this thing'
'these' (variant of 'this' used with a plural noun)
'he' or 'she' for 'this someone'; 'they' or 'them' for 'these people' or 'these things'
'both', 'every' (portmanteau words based on 'all')
'nothing', 'no-one', 'nowhere', 'anyone', 'anything', 'anywhere'
'sometimes', 'often', 'always', 'never'
'who', 'where', 'when', 'how', 'why' (not as questions, but in contexts like 'I don't know who, where, when, etc.')

Most of the semantic primes are grammatically quite versatile. *Say* and *do*, for example, can be used in constructions like the following, which, as far as we know, have equivalents in all languages:

… say something (good/bad) about something
… say something to someone
… say some words to someone

… do something to something
… do something good for someone, do something bad to someone
… do some things with some other people

It is not the case, however, that one can freely use a semantic prime in any way that English grammar allows. For example, the semantic prime 'do' *cannot* be grammatically extended with the word 'about', for example, in a sentence like 'I want to do something about it'. This is a perfectly normal way of speaking in full, ordinary English, but it does not have equivalents in other languages so it should not be used in Minimal English. Two other nonuniversal constructions that need to be avoided in Minimal

English are what grammarians call indirect speech (the 'say that ...' construction) and the comparable 'think that ...' construction. To ensure good translatability, it is better to use constructions such as the following:

He/she said: 'X Y Z'
I think about it like this: 'X Y Z'

Clearly, it takes a certain amount of time and practice to learn how to use the basic words and grammatical patterns of Minimal English.[2]

Despite the expressive power of semantic primes, more words are needed in Minimal English. The question is: How to choose them? Fortunately, NSM research has identified 60–80 words whose meanings, though semantically complex, appear to be universal or near-universal.[3] The words listed in Table 2.2 are termed 'semantic molecules' because they play an important role alongside semantic primes, as building blocks in the composition of other, yet more complex concepts. For more background and explanation, see Chap. 3.

We would also nominate the words in Table 2.3 for inclusion in the Minimal English lexicon. They are a mixed bunch. Some of them appear

Table 2.2 Selection of proposed universal semantic molecules

hands, mouth, eyes, head, ears, nose, face, legs, teeth, fingers, breasts, skin, bones, blood	Body parts
long, round, flat, thin, hard, soft, sharp, smooth, heavy	Physical
be on something, at the top, at the bottom, in the middle, in front of, around	Spatial/physical
sky, the Earth, sun, moon, stars, ground, during the day, at night	Environmental
day	Times
water, fire	Fire and water
creature, grow, egg, tail, wings, feathers	Biological
children, men, women, be born, mother, father, wife, husband	Biosocial
wood, stone	Materials
know (someone), be called	'Knowing' and 'naming'
hold, make, kill, breathe, sleep, sit, lie, stand, play, laugh, sing	'Doing'

to be semantic molecules that are fairly widespread (though nowhere near universal) across the languages of the world. As such, they are 'high value' vocabulary items for Minimal English. Others are probably not semantic molecules but are nonetheless likely to be extremely useful 'international words' for talking about things that matter to people all around the world. Provided such words are approximately translatable, and do not smuggle in too much Anglo and/or Euro cultural bias (see next section), we see no harm in including them in Minimal English. Some of these, such as *government*, *plastic*, and *photo*, if they are present in a given language, are likely to be loans or other recently introduced words; the same applies even more forcefully to *science* and *the law*. Nevertheless, a case

Table 2.3 Some nonuniversal but useful words for Minimal English

hungry, brain, heart	Body
river, mountain, desert, sea, island, jungle/forest	Environmental
rain, wind, snow, ice, air	
flood, storm, drought, earthquake	
east, west, north, south	
bird, fish, tree, seeds, grass, mosquitoes, flies, snake	Biological
dog, cat, horse, cow, pig (camel, buffalo, moose, etc.)	
family	Biosocial
month, week, clock, hour, second	Times
house, village, city, school, hospital	Places
teacher, doctor, nurse, soldier	Professions
country, government, capital, border, flag, passport, vote	'Country'
science, the law, health, education, sport	'Fields'
meat, rice, wheat, corn (yams, etc.), flour, salt, sugar, sweet	Food
knife, key, gun, bomb, medicines	'Tools'
paper, iron, metal, glass, leather, wool, cloth	'Materials'
Thread, gold, rubber, plastic, oil, coal, petrol	
car, bicycle, plane, boat, train, road, wheel, wire, engine	Technology and transport
pipe, telephone, television, radio, phone	
read, write, book, photo, newspaper, film	Literacy and media
money, God, war, poison, music	Other: nouns
go/went, eat, drink, take (someone somewhere), burn, buy/pay, learn	Other: verbs
clean	Other: adjectives

can be made that these are useful words for Minimal English if it is to be a practical aide to intercultural communication here and now, in the context of Global English.

Finally we would like to say that it is not necessarily problematical to introduce, into local versions of Minimal English, various locally important words for natural kinds and 'concrete' things. For example, in the Pacific it would not necessarily create any problems to add the word 'kava' or 'betel nut'; in the Arctic it would not create problems to add the word 'seal'. It is important, however, to be wary of abstract words. As John Locke (1959[1690] Book III. V, §8) already understood a long time ago, if we 'exactly compare different languages, we shall find that though they have words which in translations and dictionaries are supposed to answer one another, yet there is scarce one of ten amongst the names of complex ideas that stands for the same precise idea, which the word does that in dictionaries it is rendered by'. And particularly so in the case of 'abstract and compounded ideas, such as are the greatest part of those which make up moral discourses'.

2.6 How Is Minimal English Different from Basic English and Plain English?

For many people, the idea of Minimal English may bring to mind Basic English. This was a controlled and radically simplified form of English that was promoted as an international auxiliary language in the 1930s and 1940s. It was devised largely by Charles Kay Ogden, a Cambridge professor and prominent philosopher of language. He was co-author, together with his associate I.A. Richards, of the influential book *The Meaning of Meaning* (Ogden and Richards 1923), from which the concept of the 'semiotic triangle' (originally called the 'triangle of reference') originates. As mentioned earlier, Basic—which began life as an acronym for British American Scientific International Commercial (English)—had a core of 850 words and a standardized grammar that supposedly 'covered everything necessary for everyday purposes'. In its heyday, Basic was widely discussed in public, intellectual, and pedagogical circles.

Although the Basic project came in for serious criticism and lost momentum in the 1950s, it has had a strong influence on the teaching of beginner's vocabulary in English language teaching. Even today, the 850-word list forms part of Wikipedia's Simple English and the starting vocabulary of the Berlitz English Language School (a commercial language education company); and it is said to be especially influential in English language teaching in Asia.[4]

Because it seems inevitable that comparisons will be drawn between Minimal English and Basic, it is instructive to briefly compare and contrast them. The differences are actually enormous, in nearly every dimension: structure (words and grammar), intended range of functions, and in 'spirit'.

So far as words are concerned, as mentioned in Sect. 3, cross-translatability played no part at all in Ogden's thinking, and Basic included a great many words that lack equivalents in other languages. A handful of examples were mentioned earlier. A larger, still partial, sample reads as follows. It is given in two sections, titled Things and Qualities, which are categories used in the Basic system.

Things: *agreement, answer*, *authority, control, desire, experience, industry, organisation, suggestion, humour, business, competition, distribution, fiction, love, manager, mass, motion, observation, ornament, process, power, representative, request, secretary, self, sense, society, structure, system, waste…*

Qualities: *chemical, general, natural, medical, parallel, political, probable, responsible, right, private, serious, violent…*

Looking over the list of Things, the reader may well wonder at the number of 'abstract' nouns. A core feature of Basic is that almost all verbs are eliminated by rephrasing in terms of nouns, supported by a small set of multifunctional verbs, which Ogden terms 'operators'. Consequently, there are a large number of nouns, 650 in fact, and a very small number of operators. The verbal operators are *come*, *get*, *give*, *go*, *keep*, *let*, *make*, *seem*, *take*, *be*, *do*, *have*, *say*, *see*, *send*, *may*, and *will*.

The following examples show the phrasing style of Basic (pp. 49, 57, 8, 157):[5]

answering letters = giving answers to letters, getting letters answered, writing answers to letters
attacking a town = making an attack on a town
decide = come to a decision
move something = give (a thing) a move, put in motion

Even such words as 'know', 'think', and 'want', which have been identified as semantic primes and, consequently, form part of Minimal English, are glossed out of Basic, for example, think = give thought to, know = have knowledge of, and want = have desire for.

Needless to say, the capacity to form 'paraphrases' (in reality, pseudo-paraphrases) in this fashion is highly English-specific, that is, it depends on idiosyncratic grammatical patterns and peculiarities of English, which are not replicable in other languages. Ogden recognized this and prized it. Speaking of the vocabulary simplification, Ogden stresses 'nor is this now possible in any language other than English' (1940[1930]: 20, emphasis in original). And again: 'English is the only major language in which the analytic tendency has gone far enough for the purposes of simplification' (p. 25). The idea that there could be a Basic Chinese or Basic Spanish, for example, corresponding to Basic English, makes no sense at all.

Coming now to the question of intended purpose or function, it may seem at first that there is a partial overlap between Minimal English and Basic, insofar as among the functions of both is to provide an 'instrument of thought' (Ogden 1940[1930]: 11). But this partial similarity is overshadowed by the fact that Ogden's ideal was indeed that all people on Earth should be able to think as English speakers do, that is, not only in English words but with English attitudes and values (by being more 'analytical' and less 'emotional').

Minimal English wants to enable precisely the opposite effect. It wants to make it possible for English native speakers to free themselves from English ways of thinking, so that they can think outside the Anglo box and be more receptive to non-Anglo ideas. And it wants non-native speakers to be able to use English as a lingua franca without being co-opted into Anglo ideas, attitudes, and values. In a nutshell, Minimal English aims to be 'minimally English'.

Still on the issue of purpose, one of the primary purposes of Basic was to make it easier for everyone in the world to learn English. Although Minimal English has useful applications in language learning and teaching, it is certainly not intended as a way of learning English.

Finally, coming to differences in 'spirit', there can be little doubt that Ogden, Richards, and their compatriots saw other languages as a problem. Shockingly, Ogden (1940[1930]: 96) actually looks forward to the elimination of other languages: 'In fact, the experience of the past ten years makes it possible to say, with some hope of agreement, at any rate from men of science, that the chief need of our time is 1,480 more dead languages'. Needless to say, the impetus behind the Minimal English movement is very different. It values other languages as reservoirs of conceptual and cultural diversity, as gateways to new ways of thinking, feeling, and being in the world, and seeks, in part, to find a way in which the negative aspects of the spread of English as a global lingua franca can be counteracted (see Sect. 7).

These days, it seems that few people have a very clear idea about the specifics of Basic, beyond the notion that many English words in the dictionary could be eliminated in favour of the Basic vocabulary. Many people, indeed, may confuse, or at least not clearly distinguish, Basic English from Plain English. In fact, however, the two are very different. What, then, is Plain English and how does it compare with Minimal English?

Briefly, Plain English is not a controlled language at all, but rather a set of principles about how to communicate effectively to the public, especially in government and business documents. Historically a key figure was Ernest Gowers, author of *The Complete Plain Words* (1954, and never out of print since).[6] It is essentially a style guide, intended to counteract pompous, verbose, and unclear writing. Understandably, the cause of Plain English has since been taken up in many different countries and settings, for example, the American manual (PLAIN 2011) and various Australian government publications, for example, *Communicate Clearly. A Guide to Plain English* (26TEN 2013).

From a lexical point of view, the main guideline of Plain English is to avoid unnecessary jargon in favour of plain, everyday, words. Examples may be given, but there is no comprehensive list of 'Plain English' words,

or anything of that sort. Much advice about Plain English is actually to do with document design, for example: use helpful headings, write in short sections, address a single person, and deal with general before the specifics and exceptions.[7] All this is well and good, but as mentioned earlier, what is impressionistically 'plain' in ordinary English is no guarantee of semantic simplicity or cross-translatability.

In short, Minimal English is radically different from both Basic English and from Plain English.

2.7 The Many 'Untranslatables' of Global English

Returning to our theme of what Minimal English can add to global discourses in English, it is helpful to think of Global English as carrying two different loads of cultural baggage, embodied in two overlapping sets of 'untranslatables' (cf. Cassin 2014). On the one hand, there are keywords of Anglo culture, such as *right* and *wrong*, *fairness*, and *evidence*, which lack precise equivalents even in most European languages. On the other hand, there are keywords of the larger European culture, present also in English, such as *system*, *structure*, *rational*, *morality*, and *art*. Both Anglo culture and the broader European culture have stamped their imprint on Global English, and as a result much of Global English is untranslatable into the thought patterns of speakers of most non-Western languages.

In previous works, most recently Wierzbicka (2014), whose subtitle is *The Hazards of English as a Default Language*, the focus has been on the Anglo-English lexicon. The historical legacy of the Anglo culture is especially important due to the fact that many influential Anglophone writers and thinkers have a huge blind spot when it comes to 'plain' Anglo-English words such as (to add a few more examples to those mentioned above) *mind*, *fact*, *friend*, *rude*, and *sex*—apparently never suspecting that they are deeply infused with cultural thinking. There are also plenty of more 'educated' English words, such as *violence*, *communication*, *cooperation*, *commitment*, and *relations*, which are much more Anglo—and much less translatable—than most speakers of English ever suspect.

It also needs to be highlighted, however, that there are shared 'Euro' concepts that enter not only into international discourse, in highly problematical ways, but also into habitual ways of thinking. We are thinking of words like *structure*, *function*, *system*, *information*, *economics*, *politics*, and the like. Obviously, it would be unrealistic to think that such words can be expunged from Global English, but if Minimal English gains acceptance it can help counteract this broader Eurocentric cultural creep, at the same time as helping to counteract specifically Anglo bias.

As global discourse is increasingly dominated by English words, this all too often means that it is also being dominated by English-specific or Euro-specific concepts, even though this may go unrecognized when familiar, 'near-enough' translation equivalents are available. Minimal English offers a way to get around this problem, and at the same time to contribute to clearer thinking. As well, since Minimal English has its counterparts in Minimal Chinese, Minimal Russian, Minimal Finnish, and so on, expressing oneself in Minimal English facilitates translatability into one's home language, if that is a language other than English. And of course, the same thing works the other way around too; that is, messages formulated in any Minimal language can be clearly transferred into Global English, and thereby into global discourse.

2.8 Looking Forward

What are the prospects for Minimal English? Clearly there will be sceptics and opponents. In the humanities and social sciences, Wierzbicka's (2014) advocacy of Minimal English as an auxiliary lingua franca has sometimes been met with the riposte: 'I don't believe in a metalanguage'. Like Molière's Mr Jourdain, who didn't know that he was speaking prose all his life, they don't seem to realize that they themselves are using a metalanguage in all their English language publications and conference presentations, namely, Global English anchored in Anglo English. So this is one obstacle. Simply failure or refusal to see the basic point, even to acknowledge that there is or could be a problem here.

A second obstacle, to be honest, is that simple vocabulary is a 'turn-off' for some people, no matter how elegantly it is used and regardless of the

content. Sometimes, it comes down to a fear of sounding 'childish'. Sometimes it is resistance to giving up one's hard-earned linguistic virtuosity. After all, most academics and professionals are 'good with words', and our skills in this regard have contributed to getting us where we are today. Sometimes 'love of the language' is cited as the reason, though this hardly makes sense, since there is no suggestion and no prospect of Minimal English ever replacing 'full' English. In the end, these attitudes emerge out of a particular Anglo/Western linguistic ideology that establishes and values 'high-register' vocabulary and looks down on clear, simple, cross-translatable ways of saying things.[8] Running against this prejudice, there is, or at least can be, a certain aesthetic pleasure in reading—and writing—interesting thoughts in clear and simple words. As this book shows, there are people in many fields and disciplines who are open-minded and prepared to give it a go.

To close, we want to repeat two key points. First, the idea behind this book is not to oppose Global English. Rather, it is to make the case that at times—particularly in the context of cross-linguistic and cross-cultural education—some elements of Global English need to be deconstructed through, or even replaced with, some elements of Minimal English.

Equally we want to stress that Minimal English is not closed or final in any sense. We see the project as open and ongoing. We would like to think that there will soon be a 'movement' for Minimal English—and we would like to think that the spirit behind this movement will be practical, open to adaptation, improvisation. To thrive and serve its purpose, Minimal English cannot be an exercise in perfectionism or purism, and neither should it be either a target or a vehicle for academic point scoring. Minimal English is a project, a process, to help improve intercultural communication and clarity of thought.

Notes

1. For semantic explications of some key English terms in the discourse of anti-discrimination, such as *dehumanisation*, see Stollznow (2008). For an explication of *violence*, see Goddard and Wierzbicka (2014: 244).

2. The need for pedagogical materials about Minimal English is important but tangential to the present volume, which is focused on the value and range of applications. Existing resources include the textbook *Semantic Analysis* (Goddard 2011), the list of '150 Canonical Sentences for Identifying Semantic Primes and the Core Lexicogrammar of any Language', and the 'Chart of NSM Semantic Primes' (the list and chart are available at the NSM homepage [short URL: bit.ly/1XUoRRV]). These resources are, however, about NSM rather than Minimal English, and they are designed mainly for linguists and linguistics students.
3. The term 'universal or near-universal', as we use it, amounts to the claim that an identical or nearly identical meaning is found in all or nearly all languages; see Chap. 3.
4. For 15 years or so before the Chinese Revolution, Ogden's associate I.A. Richards promoted Basic in China. For a book-length study, see Koeneke (2004).
5. Many other Basic phrasings used operators (verbs) in combination with directional words, for example, 'go in' for 'enter'.
6. On the other side of the Atlantic, the comparable classic is *The Elements of Style* (Strunk 1920) and subsequent editions.
7. Ironically, one of the commonly cited principles of Plain English flies exactly contrary to Basic, namely, to 'avoid hidden verbs': 'Verbs … enliven your writing and make it more interesting. Too often, we hide verbs by turning them into nouns, making them less effective and using more words than we need. Hidden verbs are a particular problem in government writing' (PLAIN 2011: 23). The authors advise against 'Please make an application for a personal loan' (which is in the Basic style), recommending 'Please apply for a personal loan'.
8. Translations of indigenous voices and stories sometimes succumb to the appeal of high-register English words and produce distorted renditions, for example, rendering 'they killed them, we saw it' as 'we witnessed the massacre'.

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3

Minimal English: The Science Behind It

Cliff Goddard

As described in Chap. 2, the Minimal English project has emerged from, and in a sense rests upon, the findings of a program of linguistic research known as NSM (Natural Semantic Metalanguage). NSM is a wide-ranging approach to semantics, that is, the systematic study of meaning in languages. Unlike many forms of contemporary linguistics, especially the generative linguistics or biolinguistics of Noam Chomsky, the NSM approach places words and meaning at the very centre of language study (cf. Goddard and Wierzbicka 2014). Since its early days more than four decades ago, the NSM approach has been much interested in cross-linguistic semantics, that is, comparing and contrasting how different languages construe and package meaning differently in their vocabulary and grammar. The goal of this chapter is to summarize and review those aspects of NSM research which are most relevant to Minimal English. Some readers may prefer simply to browse the chapter and return to it later, as necessary.

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3.1 Sketch History and Main Ideas Behind NSM Approach

3.1.1 Paraphrase Using Simple, Easily Understood Words

The NSM approach starts with two very simple ideas. The first idea is that if we want to explain words and their meanings, we have no choice but to do so using words themselves. As Hanks (2007: 6) put it: 'There is no metalanguage other than words themselves (in one language or another) – or at a pinch derivatives of words such as logical symbols – for expressing thoughts about words'. The second idea is that, this being the case, we need to proceed very carefully to avoid the danger of getting 'tangled up in words'. In particular, we need to ensure that our explanations (or explications) of word meanings are as clear as possible and that they are not undermined by definitional circularity (i.e. going around in 'vicious circles'). The clarity principle was already clear to Aristotle (1928), who enunciated it in the section 'On definitions' in his *Topica* (6.4.141^{a}25). Aristotle stressed that to be effective any definition must be phrased in terms that are 'prior and more intelligible', that is, simpler and easier to understand. It would seem to follow that the ideal metalanguage for the purpose of semantics would consist of words which are simple and easy to understand.

People familiar with linguistics may feel a little uneasy at this point. Is it not true that many linguists, and many dictionaries for that matter, are prone to using technical terms or sophisticated expressions to describe meanings? For example, they may say that part of the meaning of the verb *to promise* is 'to undertake an obligation' or that part of the meaning of the verb *to cut (something)* is 'to bring about a separation in material integrity'. The unfortunate truth is that many linguists are either oblivious to metalanguage issues[1] or believe that they are free to employ technical formulas, often called 'formalisms', without anchoring them in ordinary natural language. As John Lyons once observed, however: '[A]ny formalism is parasitic upon the ordinary everyday use of

language, in that it must be understood intuitively on the basis of ordinary language' (Lyons 1977: 12).

At this point, we can appreciate the designation 'Natural Semantic Metalanguage approach'. It is an approach to describing meanings based on using simple words of natural language. Describing the meaning of a word by using other, simpler words sounds a lot like paraphrase, of course; and in a very real sense, paraphrase is indeed the main technique behind NSM semantics. But to be clear, the key criterion is not simply paraphrase, but, more precisely, paraphrase without circularity. In this respect, NSM semantics makes a radical break with traditional lexicography,[2] which also relies (imperfectly) on paraphrase in natural language. To make this more concrete, consider how the *Collins Cobuild English Language Dictionary* (1991) defines the word *part* via *piece*, *piece* via *part* and *bit*, and *bit* via *piece* and *part*, as follows:

part – a part of something is one of the pieces that make up an object.
piece – a piece is a bit or part of something that has been broken off, or cut off.
bit – in informal English, a bit of something is also a small piece of it
bit – in fairly informal English, you can refer to a particular part of something […] as a particular *bit* of it.

The set of definitions is confusing and self-referring. At first sight it may seem that the *Cobuild* dictionary succeeds in paraphrasing all three words—*part*, *piece*, and *bit*—but this result is possible only because of the circularity. As a matter of fact, according to NSM research, it is impossible to paraphrase the word 'part' (in contexts like 'a person's head is part of this person's body' and 'this thing has two parts') without circularity, which means that 'part' has to be recognized as a semantic prime, that is, as an irreducible or 'rock bottom' meaning. On the other hand, using 'part' and other elements, it is possible to produce satisfying paraphrases of the words *piece* and *bit* (cf. Goddard 2010).

This brings us to the fundamental notion behind NSM semantics, namely, the concept of semantic primes.

3.1.2 Semantic Primes: The Atoms (or Elements) of Meaning and Thought

Assuming it is possible to fully paraphrase word meanings in terms of simpler meanings, it would seem to be a matter of logical necessity that 'at the end of the line', so to speak, there are some ultimately simple meanings which cannot be paraphrased at all. The logic leading to this conclusion was well known to seventeenth-century philosophers, including Descartes, Pascal, Arnauld, Locke, and Leibniz. A classic quotation comes from Arnauld and Nicole's *Logic, or, the Art of Thinking*.

> I say it would impossible to define every word. For in order to define a word it is necessary to use other words designating the idea we want to connect to the word being defined. And if we again wished to define the words used to explain that word, we would need still others, and so on to infinity. Consequently, we necessarily have to stop at primitive terms which are undefined. (Arnauld and Nicole 1662)

The seventeenth-century philosophers also saw clearly that semantic primes (as we term them these days) are not just 'in' language, but also 'in' our minds, that is, they are concepts. They called them 'simple ideas' and spoke of them as the fundamentals of 'human understanding'. A clear formulation comes from Gottfried Wilhelm Leibniz (1646–1716): 'If nothing could be understood in itself, nothing at all could ever be understood' (Leibniz 1903: 430).

Among his seventeenth-century contemporaries, Leibniz stands out as the true precursor of modern systematic semantics (Wierzbicka 2001) on account of his conviction that simple ideas underlying human thought could be discovered by systematic lexical analysis. For decades he experimented with definitions of numerous words,[3] trying to establish 'the catalogue of those concepts which can be understood by themselves, and from whose combinations our other ideas arise' (Leibniz 1903: 430). He anticipated that they might be relatively few in number ('because nature usually achieves as much as possible with as few elements as possible') and universal in their reach. As George Steiner ([1992]1975: 75) put it in his classic work *After Babel*: 'Leibniz was profoundly interested in the

possibilities of a universal semantic system, immediately accessible to all men, … grounded in the very architecture of human reason and […] independent of all local variation'.

For various reasons, Leibniz was unable to complete this task in his lifetime. One reason no doubt was the huge number of other projects—practical, philosophical, mathematical, diplomatic—which occupied this remarkable polymath. He also lacked collaborators. His nineteenth-century editor Gerhard wrote: 'There are a great many manuscripts among Leibniz's papers which deal with elementary concepts and definitions…. Convinced that he would never be able to complete the great task alone, how often he yearned for help!' But in another sense, the time was not right for it. Linguistics as a discipline did not yet exist and relatively little information was available about the languages of the world. After his death, no one progressed Leibniz's interest in empirical universal semantics and the program was lost.

3.1.3 Sketch History of the NSM Approach

Fast-forwarding to the twentieth century,[4] the Leibnizian project resurfaced in the 1960s with the Polish linguist Andrzej Bogusławski (1966, 1970, and other works). Like Leibniz, he advocated seeking out the elementary units of thought through empirical investigations into natural language. The project was taken up in earnest by a young Polish linguist: Anna Wierzbicka. Wierzbicka's first landmark publication in English was *Semantic Primitives* (1972). The following year she moved to Australia and took up a post in the Australian National University, where she has been based ever since. Renowned for its typological-descriptive studies and for field work, the ANU Department of Linguistics provided an especially conducive environment for the subsequent development of the NSM theory. In the following three and half decades, Wierzbicka was joined by an increasing number of like-minded colleagues; the theory underwent successive waves of development and empirical testing and experienced a gradual upward trajectory in terms of reception and influence. The historical developments can be arranged into five periods, as described below. (Needless to say, no short overview like this can be

complete or entirely accurate, and it is also the case that NSM discovery process has depended in part on accidents of history, personalities, and a degree of luck.)

1972 to Mid-1980s This was the early development period, from the publication of *Semantic Primitives* (1972), through to *Lingua Mentalis* (1980), and into the mid-1980s. The term Natural Semantic Metalanguage was not yet in use, so the metalanguage version is sometimes referred to as pre-NSM. Over this period only 13–14 semantic primitives were proposed. Wierzbicka was virtually the sole author and was widely seen as brilliant but iconoclastic. Valuable analytical work was done on emotion terms, body parts, stage of life terms, speech acts, cases, and 'concrete' vocabulary (Wierzbicka 1985, 1987). Due to the dominance of generative linguistics, these were very tough times for a meaning-based approach to language.

Mid-1980s to Mid-1990s This roughly 10-year period can be called the 'expanding set' phase, following Wierzbicka (1989). The prime inventory grew to 37 in *Semantic and Lexical Universals* (1994). A couple of the first-generation semantic primitives ('world' and 'imagine') were withdrawn, as evidence had shown them to be not cross-linguistically viable. A further 20-odd primes were announced in *Semantics: Primes and Universals* (1996), bringing the total to 55. This version of the metalanguage is sometimes termed NSM1. The expansion of the prime inventory was driven from two directions: on the one hand, there was the need to improve the power and transparency of the metalanguage in the areas of time, space, causation, quantification, and logical relations; on the other hand, as more empirical-descriptive work was done, it often became apparent that adjustments were needed to the prime inventory or to the grammar. For detailed accounts, see Wierzbicka (1989, 1996: Ch 2) and also Goddard (1989, 2008).

This period saw increasing emphasis on cross-translatability and universals. The first major cross-linguistic survey of semantic primes appeared, the edited collection *Semantic and Lexical Universals* (Goddard and Wierzbicka, eds. 1994). Described as 'monumental' by one reviewer,

it included data on 17 languages in addition to English, only 1 of which (French) was European. Another major work was Wierzbicka's *Semantics: Culture and Cognition* (1992). The first textbook to offer a thorough grounding in NSM appeared, Goddard's (1996) *Semantic Analysis: A Practical Introduction* (revised and reissued in 2011a).

Late 1990s to 2007 The prime inventory expanded modestly to 62 primes over these years. This version of the metalanguage is sometimes termed NSM2. The key theoretical and cross-linguistic volume, *Meaning and Universal Grammar* (Goddard and Wierzbicka, eds. two vols, 2002), is situated in the middle of the period. As indicated by the title, there was increasing attention to universals of syntax and to 'whole metalanguage' studies (cf. Goddard 2002b).

An important publication towards the end of the period was Wierzbicka's (2006) *English: Meaning and Culture*, which argued comprehensively that the lexicon and grammar of English continues to bear the imprint of its own highly specific cultural history. A collective volume on semantic primes in the Romance languages (Peeters ed. 2006) broke new ground in its detailed treatment of semantic primes and their grammar in a well-known language family. Many other significant publications appeared in this period, particularly on the cross-linguistic semantics of emotions. Wierzbicka's (1999) *Emotions Across Languages and Cultures* led the way, followed by two collective volumes (Harkins and Wierzbicka eds. 2001; Enfield and Wierzbicka eds. 2002) that together presented work on 15 languages, by a similar number of authors. These years also saw the development and consolidation of the theory of cultural scripts (also termed ethnopragmatics), the pragmatic 'sister theory' of NSM semantics (cf. Wierzbicka 2003; Goddard and Wierzbicka eds. 2004; Goddard ed. 2004; Goddard ed. 2006).

2008–2014 This period is book-ended by the edited collection *Cross-Linguistic Semantics* (Goddard ed. 2008) and by the co-authored *Words and Meanings* (Goddard and Wierzbicka 2014). There was a slight expansion of the prime inventory to 65 primes. Two new primes – BE (SOMEONE/SOMETHING) and LITTLE~FEW – were added, and an 'old' prime DON'T WANT was restored to the inventory. This version

of the metalanguage is sometimes termed NSM3. The main trend over this recent period was intensified attention to the theory of semantic molecules, as described further in section 3.4. There were some simplifications to metalanguage syntax, for example, dropping the 'that-complement' construction for THINK. In lexical semantic practice, the theory of semantic templates was developed further, especially in relation to verbs.

In terms of descriptive work, two notable historical semantic studies appeared: Bromhead's (2009) *The Reign of Truth and Faith*, about aspects of seventeenth-century English, and Wierzbicka's (2010) massive *Experience, Evidence, Sense: The Hidden Cultural Legacy of English.* Monographs appeared on Russian and Danish (Gladkova 2010, Levisen 2012, respectively). There were several collective projects, such as an edited collection on 'memory' concepts (Amberber ed. 2007) with half a dozen NSM chapters and a special issue on 'social cognition' (Goddard ed. 2013).

2014 Onwards Recent years have seen only small adjustments to the NSM metalanguage, such as the change from HAVE to MINE as the semantic prime underlying ownership and possession (Goddard and Wierzbicka 2016a). Some fine-tuning and rearrangement of syntactic frames has been implemented, principally in relation to KNOW and CAN. This version of the metalanguage has been designated NSM4. The theory of lexicosyntactic molecules began to be developed. There were two key monographs in 2014–2015: Goddard and Wierzbicka's *Words and Meanings* and Wierzbicka's *Imprisoned in English*, as well as several collective volumes (Peeters ed. 2015; Goddard and Ye eds. 2015; Ye ed. 2017). Major works appeared on the semantics of Chinese musical concepts (Tien 2015) and the culture of Singapore English (Wong 2014). 2014 can also be identified as the beginning of the development process of Minimal English (see section 3.5).

It will be apparent from this review that there is a vibrant international NSM research community. It is still strongest in Australia, but there are advanced practitioners in Poland, Denmark, Israel, Ireland, Singapore, and Finland, among other countries, and of course they are all interconnected

via internet.[5] Languages that have been intensively studied using NSM methods include Arabic, Bislama (Vanuatu), Cantonese, East Cree (Canada), Danish, English, Ewe (Ghana), Finnish, French, Hebrew, Italian, Japanese, Korean, Koromu (Papua New Guinea), Mandarin, Polish, Russian, Spanish, and Vietnamese. In terms of geographical distribution and language families, there are many gaps, but there is also a great deal of diversity among these languages—six language families including languages from every continent and many different cultural types.

3.2 A Closer Look at Semantic Primes: Simple Universal Words

As we know, a semantic prime is a word meaning or concept which cannot be paraphrased (decomposed) in any simpler terms. Semantic primes are expected to be expressible by words or phrases in all languages, that is, to be lexical universals. These twin criteria mean that only a small number of words are possible semantic primes, because the vast majority of words can readily be shown to be semantically complex and/or language specific (cf. Goddard 2001). There is also a third consideration: taken as a whole, the metalanguage of semantic primes is intended to enable reductive paraphrase of the entire vocabulary and grammar of the language at large; that is, it is intended to be comprehensive.

3.2.1 How Were Primes Identified in the First Place?

> It is impossible to show that a concept cannot be further decomposed except by trying to decompose it and failing; and it is impossible to show that a concept *can* be decomposed except by trying to decompose it – and succeeding. (Wierzbicka 1980: 10)

We will briefly consider two semantic primes: GOOD and SAY. How could one possibly paraphrase, using simpler words, the meaning of *good* in contexts like (a) *This is good*, (b) *Something good happened*, (c) *People say many good things about him*. It just seems

impossible. Terms such as 'positive evaluation', 'valued', or 'pleasing' are obviously more complex than 'good' (and also highly language specific).

The only plausible route would be to try to decompose 'good' in terms of actual or potential 'desirability'; for example, by saying that 'this is good' means 'I want this' or 'people want this', but this doesn't work out for several reasons. Most importantly, to say that something is 'good' presents the evaluation in an objective mode, not as the desire of any specific person or even of people in general. The difficulty of finding a satisfactory paraphrase makes GOOD a candidate for a semantic prime. Furthermore, GOOD is clearly required for explicating innumerable lexical items such as *nice*, *tasty*, *kind*, *happy*, and *pretty* and for grammatical constructions such as benefactives. Upon checking in a range of languages, one finds that all languages appear to have a word which can express the meaning GOOD. (Obviously, this does not mean that different cultures share the same views about what kind of things are good.)

Now consider the word *say*, in everyday contexts like these: (a) *She said something to me*, (b) *What did she say?*, (c) *She said "I don't want to do it".* How could one paraphrase *say* in these contexts, using simpler words? It would be no good to use 'verbally express', since 'express' and 'verbally' are intuitively more complex and more language specific than SAY. The only plausible route appears to be via 'do', 'want', and 'know'; for example, 'X said something to Y' = 'X did something, because X wanted Y to know something'. But it fails because the right-hand side of the equation could be satisfied by many actions which are non-verbal and not symbolic.

There are numerous lexical items whose meanings are based on SAY—most notably, speech-act verbs, that is, words like *promise*, *praise*, *apologize*. In some languages, there are grammatical meanings which involve SAY, for example, certain evidential particles. Do all languages have lexical equivalents to SAY? The answer appears to be yes, although in some languages the word for SAY can also express another meaning, such as DO or WANT. In such languages, there is always (as far as we know) language-internal evidence for polysemy (cf. section 3.3.1).

3.2.2 How It Is That Primes Can Be Related to One Another?

In the early days, it was assumed that primes should be 'conceptually independent' from another, but it has since been realized that this is not so. In fact, semantic primes can be intuitively related to one another in a variety of ways, without this implying that any of them can be paraphrased in terms of the others. Consider pairs of 'opposites' like GOOD and BAD, for example. It is impossible to define either word in terms of the other (certainly, *good* ≠ *not bad*, *bad* ≠ *not good*), yet obviously the meanings GOOD and BAD are closely related—even to the point that there is an implicational relationship between the two; that is, 'good' implies 'not bad', 'bad' implies 'not good'.

Similarly, the inventory of primes includes several pairs of converses, such as BEFORE and AFTER, and ABOVE and BELOW. From a strictly logical point of view, 'A happened after B' is equivalent, to 'B happened before A' and mutatis mutandis for ABOVE and BELOW.[6] However, as pointed out by Wierzbicka (1996: 110), 'a natural language has its own ("natural") logic and in this "natural logic" BEFORE and AFTER, and ABOVE and BELOW are not mutually equivalent'. She continued:

> In both pairs each element is linked with one particular point of view, and in human communication a difference in point of view may be as important as a difference between two predicates. For example, while past and future tenses both situate events in time with reference to the present moment, past tenses do so in terms of the concept BEFORE, whereas future tenses do so in terms of the concept AFTER.

Facts like these show that not all semantic relationships are of a compositional nature, that is, there can be affiliations between meanings which are not reducible to any specifiable common component. As an example of a different kind, consider the primes IF, CAN, and MAYBE. Certainly one feels that they all have something in common (compared with, say, TWO and BODY), but it seems to be impossible to paraphrase any of them. In NSM theory, such affiliations are called 'non-compositional relationships' (Goddard 2002a: 26–31).

3.2.3 A Review of the Semantic Primes, in 12 Groups

We will now briefly run through the 65 semantic primes, using the 12 groupings used in Chap. 2. A slightly more elaborate set of groupings, accompanied by linguistic labels, is often used in technical linguistic publications. For reference, it is given in Appendix A. There are also other ways of grouping primes, according to their shared grammatical properties; for example, we could regard GOOD, BAD, BIG, SMALL, NEAR, FAR, A LONG TIME, and A SHORT TIME as falling into a single group—on the basis that all of them can be modified by VERY. Likewise, I, YOU, HERE, and NOW can be seen as forming a grouping (linguists term them deictics) because they are all tied to the speech situation and because they are all resistant to modification.

- **I~ME, YOU,** SOMEONE**, SOMETHING~THING, PEOPLE,** BODY**,** KINDS**,** PARTS

This group represents what traditional grammar calls 'substantive' words. The presence of I and YOU as semantic primes implies that first-person and second-person orientations are integral to human thinking and cannot be reduced to third-person formulations. Note that there is a clear distinction drawn between SOMEONE and SOMETHING. This might seem like simple common sense, but in linguistics and logic, scholars often use abstract or technical terms such as 'participants', 'arguments', or 'entities', which gloss over this distinction. PEOPLE also appears as a semantic prime. As far as I know, no other system of semantic analysis has any analogue of this preeminently 'social' semantic unit. The presence of BODY as a semantic prime is another distinctive feature of NSM semantics. It provides a unique hinge for 'embodiment' semantics. PARTS and KINDS are both 'relational' in the sense that are always connected to something else, for example, 'many parts of something', 'many kinds of something', and so on. Few would deny that that parts (partonomy) and kinds (taxonomy) are essential ingredients in human thinking.

Why, it may be asked, are there so few nouns in this division of the inventory of semantic primes? Where are words for various universals of human experience, such 'sun', 'water', 'hands', and 'mouth'? The answer is that these important notions are not semantically simple and are

therefore not semantic primes; rather, they are universal semantic molecules (see section 4).

- **THIS, THE SAME, OTHER~ELSE**
- **ONE, TWO, MUCH~MANY, LITTLE~FEW, SOME, ALL**

The words in these two groups can combine directly with the substantives (except for I and YOU) to form expressions like 'this someone' (= 'this person', 'he/she'), 'something else', 'the same kind', 'many people', 'all these things', and so on. As well, the semantic prime THIS can stand alone in various contexts, for example, 'this is bad', 'it is like this: …', 'I don't want this'.

- **GOOD, BAD, BIG, SMALL**

These are the only indefinable, that is, semantically simple, descriptors. GOOD and BAD, the semantic lynchpins of 'evaluation', are very versatile, appearing in contexts such as 'something good happened', 'this someone did something very bad', 'I want to do something good for you', 'if you do this, people can think something bad about you'. Other important physical properties, for example, 'hard', 'long', 'round', are semantic molecules.

- **THINK, KNOW, WANT, DON'T WANT, FEEL, SEE, HEAR**

There is a fairly rich inventory of mental primes, some of which (especially, THINK) are largely reserved for use with human subjects. These have important implications for naïve 'theories of mind'. One matter that calls for comment concerns WANT and DON'T WANT. In English, as in many (not all) languages, their exponents are morphologically related to one another, and DON'T WANT is also morphologically related to NOT (negation). However, the prime DON'T WANT (as in 'I don't want this', usually voiced by young children simply as *No!)* represents 'rejection' (metaphorically, pushing something away), not the simple negation of wanting. The relationship between WANT and DON'T WANT is non-compositional, akin to the relationship between opposites or converses.

- **SAY, WORDS, TRUE**

The semantic prime SAY is, obviously, crucial to human communication. To SAY something in its basic sense, however, is not necessarily tied to WORDS. One can SAY ('express') something using gestures, and one can easily imagine someone saying something with a look or tone of voice. Of course, the primes SAY and WORDS are closely related (normally, people say things with words; see section 3.3 below), but there appears to be a basic distinction between the expressions 'say something', which is focussed on the content of what is said, and 'say some words', which is focussed on the form, so speak. For discussion, see Wierzbicka (1996: 107–8); Goddard (2011b). As for TRUE, it is the most specialized of all the semantic primes, in the sense that it can apply only to something someone says (or, perhaps, thinks): 'it is true' or 'it is not true'.

- **HAPPEN, DO, MOVE**

These are the 'dynamic' primes, underlying notions of events, actions, and movement. They are all time-bound concepts: something happens at some time, someone does something at some time, something moves in a place at some time.

- **BE (SOMEWHERE), BE (SOMEONE/SOMETHING), THERE IS**

It is widely accepted in linguistics that the 'be of location', for example, in a sentence like 'She is in Sydney', is a different element to the 'be of identity', for example, in a sentence like 'She is my mother'. Many languages have two different words. NSM linguists propose that the 'be of location' also allows us to speak (and think) about 'being with someone'. As for THERE IS (roughly, existence), again, many languages have a separate word for this, for example, Spanish *hay*. Despite the formal overlaps in English and in many other languages, it seems clear that none of these concepts can be satisfactorily explicated in terms of the others.

- (IS) MINE

This prime underlies concepts of ownership and 'possession' (alienable possession, in linguistic parlance), which can all be sourced back to the key expression 'it is mine' (Goddard and Wierzbicka 2016a).

- LIVE, DIE

Presumably few would question the plausibility of LIVE as a semantic prime. It is less obvious why we need DIE as well, but the basic idea is that DIE represents a deeper and more existential event than simply coming to the end of one's life. Separating LIVE and DIE is also necessary to provide conceptual ingredients for various notions of life after death.

- TIME~WHEN, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT
- PLACE~WHERE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH

These two groups of primes are connected with time and place, respectively. They have a similar number of members, and there are obvious analogies or parallels between them. Both groups have a substantive-like member. One can speak, for example, of something happening 'at this time' and 'in this place' (or 'at the same time', 'in the same place', etc.). Both groups have a deictic element: NOW and HERE, respectively. Both include converses (e.g. BEFORE and AFTER, ABOVE and BELOW) and 'dimensional' expressions (A LONG TIME and A SHORT TIME, FAR and NEAR). The time group has FOR SOME TIME and MOMENT, which are necessary for capturing ideas of duration and 'momentariness'. The place group includes INSIDE (containment) and TOUCH (contact), which are both about physical objects, as much as place per se.

- NOT, CAN, MAYBE, IF, BECAUSE, VERY, MORE, LIKE~AS

From a grammatical point of view, this is a rather disparate collection of items, albeit they all express notions which can be seen as broadly 'logical' in some aspect. Few would dispute that negation (NOT) is a

fundamental of human language and thought. The NSM system recognizes no less than three primes (CAN, MAYBE, IF) connected with possibility and hypothetical thinking. BECAUSE is the natural language anchor for notions about causality. Broadly speaking, VERY and MORE are about intensification and 'increase', though they are quite different in their syntax and in how they are utilized in explications. Finally, LIKE (as in 'it happened like this', and 'someone like me') is one of the most versatile and multifunctional of all primes.

3.2.4 Four Complications (Lexical Polysemy, Formal Complexity, Allolexy, and Portmanteau Expressions)

It is useful at this point to introduce the term 'exponent' to designate an expression in a given language that expresses a semantic prime. We can now say that the relationship between a semantic prime and its exponent(s) is not necessarily, or even typically, one-to-one. The exponent of a prime can have more than one meaning, that is, it can have other meanings in addition to the semantically primitive one, and, vice versa, a prime can have more than exponent. Misunderstanding on these points is rampant among many under-informed critics of NSM.

Lexical Polysemy Exponents of primes can be polysemous, with different secondary meanings in different languages. For example, the English word *feel* and the Malay word *rasa* have the same primary sense, namely, the prime FEEL, but the English word *feel* has a secondary meaning related to 'touching' which is not shared by the Malay word, while Malay *rasa* has a secondary meaning 'taste' which is not shared by English *feel*. Another example, which will be closer to home for many readers, concerns the prime DO. In many languages, including European ones, exponents of DO can also mean something like 'make'. So, when it is said that a given language has exponents for the semantic prime FEEL or DO, for example, this is not the same as saying that these words are 'the same' in all respects as their English equivalents.

After more than 20-years study of the exponents of semantic primes across diverse languages, NSM researchers have built up a stock of knowledge about recurrent patterns of polysemy. Certain polysemies are known to be common across languages. A selection is given in Table 3.1.[7]

Formal Complexity Exponents of primes in different languages can be formally complex in various ways. For example, in English the words SOMEONE and INSIDE are morphologically complex, but their meanings are not composed from the meanings of the morphological 'bits' in question. That is, the meaning SOMEONE does not equal 'some + one'; the meaning INSIDE does not equal 'in + side'. In meaning terms, SOMEONE and INSIDE are indivisible.

Table 3.1 Selected common polysemies of exponents of semantic primes (after Goddard 2012, data from studies in Goddard and Wierzbicka 1994, 2002; Peeters 2006; Goddard 2008; and Gladkova 2010)

Semantic prime	Additional meaning(s)	Language and relevant lexical item
DO	'make'	Amharic (*adərrəgə*), Ewe (*wɔ*), Italian (*fare*), Kalam (*g-*), Malay (*buat*), Mbula (*-kam*), Russian (*delat'*), Spanish (*hacer*), Swedish (*göra*), Yankunytjatjara (*palyani*)
FEEL	'taste and/or smell'	Ewe (*se le lãme*), Italian (*sentire*), Kalam (*nŋ*), Malay (*rasa*), Russian (*čuvstvovat'*), Spanish (*sentir*)
	'hear'	Amharic (*tə-səmma-*), Italian (*sentire*), Kalam (*nŋ*), Spanish (*sentir*)
	'feel by touch'	Acehnese (*rasa*), English (*feel*), Italian (*sentire*), Spanish (*sentir*)
BEFORE	'first'	Kalam (*nd*), Kayardild (*ngariija*), Lao (*kòòn¹*), Mbula (*muŋgu*), Samoan (*muamua*)
	'ahead of and/or in front of'	Kalam (*nd*), Kayardild (*ngariija*), Russian (*do*), Samoan (*muamua*)
WORDS	'what is said and/or message'	Amharic (*k'al*), English (*words*), Malay (*perkataan*), Mbula (*sua*), Russian (*slova*)
	'talk and/or language'	Amharic (*k'al*), Kayardild (*kangka*), Korean (*mal*), Mandarin (*huà*), Mbula (*sua*)

Exponents of primes can also be phrasemes, that is, fixed multi-word expressions, such as the English expressions *a long time* and *a short time*. It is not hard to discern that in these expressions the words 'long' and 'short' do not have their normal meanings. Despite the formal complexity, NSM researchers argue that these composite forms each express a single, unitary meaning. Exponents of primes can also be bound morphemes. For example, in Yankunytjatjara, BECAUSE is expressed by the suffix *–nguṟu*.

Allolexy In many languages, including English, there are multiple exponents of a single prime which occur in different contexts. In linguistic terminology, the prefix *allo-* indicates the existence of alternative versions of items belonging to various categories; for example, allomorphs are alternative forms of a given morpheme, allophones are alternative forms of a given phoneme. Following this terminology, alternative word forms for a given semantic prime are called 'allolexes'. Patterns of allolexy are different in different languages, sometimes for no apparent reason. For example, in English the semantic prime OTHER has a postnominal allolex *else*, which is normally used with indefinite expressions; compare *another place* vs. *somewhere else*, *another thing* vs. *something else*, and so on. Spanish and German, on the other hand, get by perfectly well without any word comparable to *else*. They use the same word for OTHER (Spanish *otro*, German *andere(r)*) with indefinites and with ordinary nouns. Other instances of allolexy are connected with the grammatical character of a language. For example, German is a language with grammatical gender, so its word for OTHER has different forms (*andere*, *anderer*) depending on the gender of the noun it is modifying. Many languages have systems of 'case', meaning that words appear in different forms depending on their grammatical role in a sentence. English has a remnant of this in its alternation between the forms *I* (used before a verb) and *me* (elsewhere). As a final example, English NOT has the verbal allolexes *don't* and *doesn't* (with the 'dummy verb' *do*), which are used to negate most verbs; for example, 'I don't know' = 'I not know'. The point is that all these formal variants are purely cosmetic so far as meaning is concerned.[8]

How can one be sure that a particular formal variation is an instance of allolexy? As usual in NSM semantics, the test is paraphrase. Two forms

can be allolexes only if there is no paraphrasable difference between them. Another useful benchmark is what happens when NSM sentences in one language are transposed into another language. Naturally, all the grammatical trappings in the original language are lost. For example, if NSM based on Russian, which is a highly inflectional language, is transposed into Chinese, a great amount of formal, allolexical variation (gender, case, person agreement on verbs) is lost.

This raises the question of the different tense forms of verbs, for example, the difference between English 'This often happens' and 'This often happened'. In everyday English, this difference (*happens* vs. *happened*) is not allolexy because it is meaning-bearing: the form *happened* (past tense) conveys that the event took place 'at some time before (now)'.[9] This means that when using NSM based on English (or any other language which has verbal tense), one has to be careful that particular tense forms do not 'smuggle in' implicit semantic content. The solution is to ensure that any past tense use of a verb, for example, is accompanied by a phrase such as 'at some time before' which puts the semantic content of the tense ending into words. This makes the meaning explicit and cross-translatable even into languages which lack verbal tense.

Portmanteau Expressions A single word (or affix, or phraseme) can express a combination of semantic primes. Portmanteaus with NOT are fairly common. A simple example is English CAN'T, combining CAN and NOT. Many languages have several portmanteaus that involve NOT. Portmanteaus with LIKE are also common. For example, German has a portmanteau *so* for 'like this'; likewise Yankunytjatjara has *alatji*. In some languages certain combinations of semantic primes are expressible only via a portmanteau; for example, Cantonese has a portmanteau *móuh* of NOT and THERE IS; Polish has the portmanteau expression *dawno (temu)* for A LONG TIME BEFORE. This is not a problem, provided that native speakers can clearly recognize what is going on.

In English NSM and in Minimal English, we commonly use the portmanteau expressions 'often' (= at many times) and 'sometimes' (= at some times).

3.3 Grammar Matters: Universal Grammar Versus Language-Specific Grammar

The term 'grammar' can refer to different aspects of language structure: both to combinations of words and the order in which they occur (linguists call this syntax) and to the changing forms that words take in different grammatical contexts (linguists call this morphology, which also includes how words can spawn other, related words by changes in form). In the end, the simplest idea is that grammar is about how words can be combined—about what can go together with what.

Obviously, the metalanguage of semantic primes has its own syntax, and this is (or, ought to be) universal in the sense that the same principles of combination should apply in any language. For example, it should be possible, in any language, to combine the primes I, NOT, and KNOW to order to say the equivalent of 'I don't know' and to combine PEOPLE, ALL, and DIE to say the equivalent of 'all people die'. For a more complex example, it should be possible in all languages to combine IF, DO, SAY, CAN, BAD, and other primes, to express a complex meaning like 'if you do this, people can say something bad about you'. Notice that the order of the words and phrases doesn't matter. Different languages put words in different orders. All that matters is whether the same range of combinations is possible in all languages. As described earlier, NSM researchers have been investigating the grammar of semantic primes for many years, and a great deal is now known about it.

It turns out that the best way forward is not to try to state very general 'rules' that would apply across the whole metalanguage, but rather to look at each semantic prime individually, asking: How does this prime 'work' grammatically? How can it combine with other primes to form phrases and sentences? From this point of view, it can be said that every prime has its own mini-grammar. Some primes, such as DIE and TRUE, have a very limited range of grammatical options. Others have a basic or minimal frame, but also allow several extended grammatical options. For example, using the semantic prime DO, we can say not only that 'someone does something (at some time)' but also that 'someone does something to someone else'. Using the semantic prime SAY, we can say not only that 'someone said something (at some time)', but that 'someone

said something about someone else'. We expect that in all languages, the words for DO and SAY (or their allolexes) can be used to say such things, even though the formal expression will be different. English makes use of propositions like 'to' and 'about', but other languages may use other kinds of grammatical words, or case endings, or more exotic devices such as serial verb constructions, to get the same effect. It doesn't matter so long as the meanings expressed are the same.

Extended grammatical options are often referred to in the technical literature as grammatical frames or as valency options. Table 3.2 shows some of the key grammatical frames for DO and SAY, which actually have the most elaborate array of possibilities of all the semantic primes. It shows five frames for DO and six frames for SAY. The claim is that all these frames have their equivalents in other languages, be it Chinese, Finnish, Russian, Vietnamese, or whatever.

Over the years, there has been a lot of fine-tuning of the posited grammar of semantic primes, in response to accumulating evidence about languages and/or as a result of deeper conceptual analysis. In recent years, NSM researchers have been using a visual display in the form of a Chart of NSM Semantic Primes, downloadable from the NSM Homepage and updated from time to time. Each prime has a cell of its own, in which certain key grammatical combinations or frames are listed.

Sometimes the exponent of a prime allows grammatical extensions which look like additional valency options, but which are actually complex language-specific constructions. For example, in English the verb *do*

Table 3.2 Selected grammatical frames for DO and SAY

someone DOES something
someone DOES something to someone else
someone DOES something to something
someone DOES something with something
someone DOES something good for someone else
someone SAYS something
someone SAYS something to someone else
someone SAYS something about something
someone SAYS: '...'
someone SAYS something with some words
someone SAYS a word to someone else

can be used to talk about 'doing something about something', but this construction expresses a complex meaning (involving thinking about a situation, wanting it to be different, and doing something because of it), which, furthermore, lacks equivalents in many languages. Likewise, in English one can speak about 'feeling that such-and-such', for example, *I feel (that) we should go now*, but this construction is a kind of amalgam of FEEL and THINK, lacking equivalents in many other languages. Even the 'think (that) …' construction, which sounds so basic in English, lacks equivalents in many languages; hence, in NSM instead of saying *I thought that she was at home*, for example, one says instead 'I thought like this: she is at home').

These examples underline the point that NSM is not just a vocabulary list, but truly a mini-language. To use NSM properly, one has to learn and comply with the allowable grammar, as well as confine oneself to the allowable words. The same applies to Minimal English, though perhaps not so strictly (some compromise on strict NSM grammar may be acceptable, provided it does not interfere with translatability). See Chap. 2. There are many other aspects of NSM grammar that cannot be covered here for reasons of space.

3.4 Semantic Molecules, Other Lexical Universals, and Near-Universals

3.4.1 What Are Semantic Molecules?

Semantic molecules are non-primitive, but still relatively simple, meanings which function alongside semantic primes as building blocks of meaning. In NSM explications, they are marked with the notation [m] (Goddard and Wierzbicka 2014; Goddard 2016). Semantic molecules can be explicated into primes, so there is no danger of circularity and no compromise of the reductive principle. The notion is similar to that of 'intermediate expressions' in the Moscow Semantic School (Zholkovsky 1974[1964]; Mel'čuk 1989, 2012). The idea of semantic molecules was implicit in Wierzbicka's mid-1980s works on concrete vocabulary (Wierzbicka 1985), which employed defining vocabularies of several

hundred words. It was already apparent that plausible explications of many words from these domains could not be achieved solely in terms of semantic primes, unlike with words from abstract domains such as emotions, values, speech-acts, and discourse particles.

Explications for animal words like *cat*, *dog*, *horse*, and *mouse*, for example, require the use of body-part terms, such as 'head', 'legs', 'mouth', 'teeth', 'tail', 'eyes', and 'ears', and also descriptor words such as 'long', 'round', and 'sharp'. Verbs like 'kill' and 'eat' are also needed to describe characteristic habits of these creatures. Explications for folk-biological terms need words such as 'fish', 'bird', and 'creature' as semantic molecules (e.g. it would be a very implausible explication for *salmon* and *trout* that did not include the information that they are 'fish'). Explications for artefact words (such as *cup* and *knife*) require the nouns 'hands', 'fingers', and 'mouth', among others, as well as verbs like 'hold', 'eat', and 'drink'. Many body-part words require descriptors like 'long' and 'round', like *legs* and *eyes*, respectively, and some require physical quality words such as 'hard', for example, *teeth*, *bones*. The reader will already be noticing that many of the same putative molecules are needed across different areas of the lexicon.

The principle was clear enough: certain complex terms were needed as 'concept-building' elements (Wierzbicka 1991). The expression 'semantic molecule' was being used in 1996 (Goddard 1996). It was also clear that considerable empirical work would be needed, across different lexical fields, to figure out the optimal inventory of semantic molecules, to see how they were arranged into hierarchies or levels of complexity, and to explore the relative roles of universal or near-universal versus language-specific semantic molecules. Broadly speaking, systematic theoretical work on molecules got going in earnest only in the twenty-first century. The remainder of this section summarizes our current understandings in this field.

One important result is that there are 'molecules within molecules' or, to put it another way, there are chains of semantic dependency between words of different levels of complexity. This principle is depicted schematically in Fig. 3.1 for three 'top-level' domains, which we can loosely call artefacts for eating and drinking, names for celestial bodies, and kin terms, respectively. Each level depends, semantically and semantically, on the level beneath it—with the whole thing resting ultimately upon the bedrock of semantic primes. For example, looking at the left-most diagram,

'mouth' and 'hands' can be explicated solely in terms of semantic primes. Using these words in combination with semantic primes, it is possible to explicate the concept of 'water' (Goddard 2016). The concept 'drink', in turn, depends partly on 'water' (along with many other elements, of course) and, moving one level higher, the concept of 'cup' depends partly on 'drink'.

In a similar fashion, the middle diagram in Fig. 3.1 depicts the claim that 'sky' is a foundational molecule for many environmental concepts, including 'during the day' and 'at night'. Obviously, both these concepts also depend heavily on expressions fashioned purely from semantic primes such as 'at a time when …' and 'people can/can't see things well from some time'. 'During the day' and 'at night' in turn are conceptual ingredients in concepts such as 'sun', 'moon', and 'stars' (Goddard 2016; cf. Chap. 8, this volume). Likewise, in the domain of kin terms, 'child' (or, 'children') is a basic semantic molecule which is conceptually prior even to 'woman' and 'man'. To build into an account of kinship, the molecule 'be born' is also indispensable but with these molecules in hand the most basic kinship concepts, namely, 'mother' and 'father', can be explicated, and these in turn open the way for more complex and more language-specific terms, such as 'brother' and 'sister', to be explicated (Wierzbicka 2016).

Needless to say, many of the details of these claims are non-obvious. For example, it may be asked: How do we know that 'during the day' is simpler than 'sun'? Couldn't it be the other way around? And why is

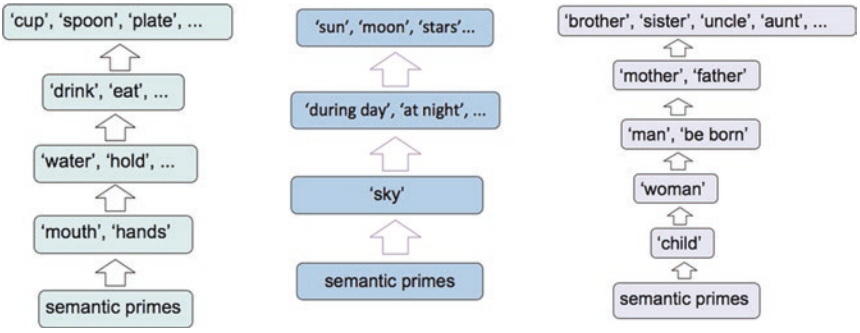

Fig. 3.1 Diagrams illustrating how complex concepts are successively built up from simpler ones, in three domains

'woman' regarded as semantically simpler than 'man'? The conventional view in linguistics either puts them on a par, or else sees 'man' (or, 'male') as the relatively simpler term. To questions like these, the answer is that these claims have emerged from painstaking conceptual analysis, that is, experimenting with different approaches and with many alternative formulations (Goddard and Wierzbicka 2014: Ch 2). It is not possible, or necessary, in this chapter to go over all the arguments and evidence for individual analyses. The curious or sceptical reader can consult the relevant literature.

Following from the exposition so far, it is clear that semantic molecules enable great compression of semantic complexity, even though this complexity is 'disguised by its being encapsulated and telescoped into lexical units embedded one in the other, like a set of Russian dolls' (Wierzbicka 2009a). Though this observation has great theoretical importance for conceptual semantics, for the purpose of Minimal English, this kind of 'semantic compression' hardly matters. The more important take-away message is that there is a stock of basic, and probably universal, semantic molecules that can be taken for granted and incorporated into Minimal English. And, equally important, that the membership of this second tranche of 'safe words' (in addition to the first tranche, the semantic primes) does not depend on anyone's immediate and untested intuitions, but rather rests on a body of serious analytical work.

In the next section, we will overview the proposed inventory of universal molecules, before moving to the topic of 'approximately universal' molecules, and then to highly language-specific semantic molecules. Before that, it is well to make one further point to correct a possible misimpression that may be gained from the layout of Fig. 3.1. Contrary to the look of this diagram, it is not the case that semantic molecules are restricted to particular 'silos of meaning'. A molecule such as 'water', for example, is not only necessary for explicating the concept of drinking (basically, it helps get to the notion 'liquid', i.e. something like water). It is obviously necessary for explicating dozens or hundreds of other ordinary concepts, such as 'rain', 'river', 'lake', 'see', and 'tears', as well as being a conceptual constituent of verbs like 'pour' and 'flow' and the names of other 'liquids' such as *milk*, *oil*, *tea*, *petrol*, and so on. Likewise, 'children' (and 'child') not only helps explicate 'women', 'be born', and many other

obvious 'child words', such as 'play', 'toy', and 'school', it may turn up in unexpected places, for example, in the explication for English words like 'tender' (in the sense of 'tender feelings', which incorporates a reference to how one may feel towards a small child) and 'cute'. In short, all or most of the inventory of proposed universal molecules are extremely prolific or versatile.[10]

3.4.2 Universal Semantic Molecules

As mentioned several times, current research suggests that some semantic molecules are likely to be found in all or most languages. Examples are given in the list below (about 60 in number) and discussed briefly in their respective groups. Aside from its importance to cross-cultural communication, the likely existence of certain semantic molecules in all languages has profound implications for our understanding of human cognition and knowledge.

- **'Body-part' words: hands, mouth, eyes, head, ears, nose, face, legs, teeth, fingers, breasts, skin, bones, blood**

Notice that not all English body parts are included in this list. Words like 'shoulders', wrist', and even 'feet' and 'neck', are absent because they are known to be language specific. It may well be, of course, that such words still play a part in concept-building in languages which have them; for example, 'feet' is a necessary molecule for explicating the English verb *walk* (Goddard et al. 2016).

- **'Biosocial', that is, stage of life and kin terms: children, men, women, be born, mother, father, wife, husband**

Again, it bears noting that many seemingly ordinary English words are absent from this list on account of non-translatability; for example, 'baby', 'boy', and 'girl' are absent from the stage of life list, and 'brother' and 'sister' are absent from the kin list.

- **'Biological' world: creature, grow (in ground)**

It seems that perhaps only these two words have a reasonable claim to strict universality. 'Creature' underlies all words for animals, fish, birds, and other life forms,[11] and 'grow' (in the 'ground') underlies the world of 'plants'. There are also many other near-universal or approximately universal molecules in this area (see next section).

- **'Physical qualities': long, round, flat, hard, soft, sharp, smooth, heavy**

Such words are essential for characterizing all manner of real-world things and their parts, including most body parts. It seems likely that these meanings are present in all languages, once polysemy is taken into account. Obviously words like 'long', 'hard', and 'sharp' have several meanings. The meanings we are interested are found in expressions such as 'something long', 'something hard', and 'something sharp'.

- **'Position and orientation in space': be on (something), at the top, at the bottom, in front, around**

This group of words are to do with where something is in relation to a physical object, someone's body, and so on. Except for 'be on (something)', whose meaning has to do with touching and stability of position, the words in this group involve where something is in relation to something else. They depend on semantic primes ABOVE, BELOW, or ON ONE SIDE, together with other elements.

- **'Materials': wood, stone**

These may well be the only two materials which are universally attested and available across all geographical zones. The language-specific molecules in this grouping are, of course, much more diverse, including words like 'paper', 'glass', and 'metal'.

- **'Environmental' words: the sky, the sun, the ground, the earth; during the day, at night; water, fire**

This grouping falls into three clusters. They roughly correlate with places ('sky', 'sun', 'ground', 'on earth'), times ('during the day', 'at night'; notice that this pair of expressions is adverbial), and natural elements ('water', 'fire').

- **'Time periods, natural units of time': day, year**

'Day' in this sense is noun-like, as in expressions like 'one day after'. The cross-linguistic status of 'year' is still uncertain.

- **'Knowing and naming': know (someone), be called**

The idea that we 'know' certain people (and in some cases, 'know them well') is an essential ingredient in many concepts and cultural scripts concerned with human interactions and relationships.[12] As for 'be called', this semantic molecule underlies naming, that is, linking a person, place, or thing with an identifying word.

- **'Doing': hold, sit, lie, stand, sleep; play, laugh, sing; make, kill**

Before going through this list, it is interesting to observe the absence of various verbs that are often assumed to represent universals, such as 'hit', 'eat', and 'go'. Some of these are found in later sections of this chapter, but in the present section, we are concerned with plausible candidates for universal status, and it is known that verbs like 'hit', 'eat', and 'go' are quite variable cross-linguistically. Most of the better candidates, such as those listed, are fairly simple in their semantic structure, though 'kill' and 'make' (in the sense of 'making a tool, etc.') are the only ones that may be composed purely of semantic primes. 'Hold (something in the hand)' is a plausible candidate on account of the importance of the hands in using tools of all kinds. The three 'body posture' verbs ('sit', 'lie', 'stand') involve what can be thought of as canonical positions of rest or readiness of the human body. 'Sleep' (in the sense 'be sleeping') includes 'lie' and 'at night'

in its meaning structure—not as necessary conditions, but in terms of a prototype ('as people often do when it is like this: …').

'Play' (as in 'children were playing outside'), 'laugh' (as in 'she was laughing'), and 'sing' (as in 'they were singing') are all activity verbs, that is, their basic senses all imply duration, and they are all connected with potential good feelings in people.

'Kill (someone)' is a fairly plausible semantic molecule, reflecting the role of violence in human life. The status of 'make' is not so clear. Certainly it is often and rightly said that humans are the 'tool makers' par excellence, but it is also true that 'make verbs' in the world's languages are very polysemous and can have widely different ranges of use. The current hypothesis is that there is a shared meaning, but the details are not perfectly clear at this point (cf. Goddard and Wierzbicka 2016b), so the proposal that 'make' is a universal semantic molecule is still tentative.

In the next two sections, we turn to semantic molecules which are language specific to a greater or lesser extent: from 'approximate' universals (section 3.4.3) to highly culture-specific molecules (section 3.4.4).

3.4.3 Language-Specific but 'Approximate' Universal Semantic Molecules

Despite the inherent interest and importance of universal semantic molecules, it is incontrovertible that there are many aspects of shared human experience which are not associated with any strictly universal words. Consider 'eat' and 'drink', for example. All people eat and drink, as we say in English, but it is a fact that not all languages have verbs that precisely match English 'eat' and 'drink' in their meanings. There are languages like Kalam (Wierzbicka 2009b), which have one main verb to cover both activities, as we see them in English, and there are languages like Mandarin Chinese and Shanghainese (Ye 2010) where the semantic boundary between the near equivalents to 'eat' and 'drink' is drawn slightly differently to English. Nonetheless, it can hardly be doubted that in any language the nearest equivalents to 'eat' and 'drink' are important semantic molecules. 'Eat' and 'drink', then, are examples of what we are terming 'approximate' universal molecules (the term is somewhat oxymoronic, to be sure).

So-called "life-form" words (Berlin 1992), such as 'bird', 'fish', and 'tree', furnish a second example. On the one hand, a reliable body of linguistic anthropology and ethnobiology indicates that comparable words do not have exactly the same meanings in all languages. On the other hand, it seems likely that all languages have some such terms and, equally importantly, that in any language, there will be numerous words for different kinds of bird, different kinds of fish, different kinds of tree.

Presumably in many cases, it will be possible to identify a common core of meaning that is stable across languages, despite the variability in other respects. For example, with 'eat' and 'drink', the common core evidently turns on the idea of someone doing something to something as people often do, because of wanting some of it to be first inside the mouth and then somewhere else inside the body (cf. Goddard 2011a: 278–285). How 'eat and drink' words differ across languages concerns the mechanics of the process, which is connected with the kinds of foodstuff being consumed (roughly, how solid and/or liquid it is). With 'bird' and 'fish', the common core presumably turns on the idea of creatures of many kinds that belong in the air and in the water, respectively, and have some shared bodily features, such as wings or fins (cf. Wierzbicka 1985; Goddard 2011a: Ch 7).

At the present time, it seems reasonable to propose the following short list of possible 'approximate' universal molecules. They are a disparate set. In the biological sphere: 'seeds', 'grass', 'flower', 'egg', and 'dog' (because dogs are nearly universal animals in people's lives). In the area of human life and social relations, perhaps 'house' and 'family' would have some claim to being 'approximate' universal molecules, remembering that this hypothesis only posits the existence of a shared semantic core and thus allows for some semantic variability.

In the environmental department, it may be that words like 'river', 'sea', and 'mountain' have some claim to being approximate universals, despite the known variability in ethnogeographical vocabulary (Bromhead 2011, 2013). The putative common core of the concepts 'river' and 'sea' is that they are places where is a lot of water, with 'river' additionally implying that the water is moving (flowing) and that such a place, that is, a river, has two sides, and 'sea' additionally implying something like 'vastness'. As for 'mountain', the putative common core would be that of a very elevated place, that is, the place at the top of it is (or, is thought of

as) very far above the surrounding land below. One wonders about words like 'jungle' or 'forest', which might have a common core in terms of there being a great many trees in one place, such that when people are there, they can't see very far because of it.

In relation to 'foods', it is possible that 'flour' and 'sweet' (and perhaps 'meat') might qualify as semantic molecules. The rationale for 'flour' is that grinding is a very widespread, if not universal, technology and that the meaning of the verb 'grind' appears to require something like 'flour' as a semantic molecule (grinding is, of course, typically used not only for grain but for other purposes as well). As for 'sweet', it appears to be a very widespread semantic molecule in words for kinds of fruits, as well as for human made delicacies.

3.4.4 Other Possibly Universal or Near-Universal Words

Are there words whose meanings are universal or approximately universal, but which are not semantic molecules, that is, which do not function as conceptual building blocks for other word meanings? It seems logically possible. If it were true, it would be of considerable interest to linguists, particularly to semanticists and lexical typologists. It is would also be important from the point of view of Minimal English, where the main consideration is translatability.

I will just mention a few possibilities here. 'Moon' and 'stars' seem like reasonable candidates for universal status, yet they do not seem to be particularly important as semantic molecules (though 'moon' may be part of the concept of 'month'). Also in the environmental department, one may ask whether approximations to 'east', 'west', 'north', and 'south' exist in all or most languages. Among body parts, 'brain' and 'heart' seem likely candidates. If there is a universal tool, with functional equivalents across all cultures, it would arguably be 'knife', yet it too does not seem to be very important as a semantic molecule. Among 'doing' words, it may be that words like the following are widely attested, at least approximately, in the world's languages, without being semantic molecules: 'go/went', 'take (someone somewhere)', and 'learn'. Relatively little research has yet been done into the cross-linguistic semantics of most of these words.

3.4.5 Language-/Culture-Specific Semantic Molecules

In English and in other contemporary languages, and presumably in all languages, there are many semantic molecules which are tied to local aspects of geography, history, or culture.

The most obvious examples are words connected with the environment, such as 'island' or 'snow'; staple foods, such as 'rice', 'wheat', 'corn', 'yams', and 'plantain'; and words for large and important animals, such as 'horse', 'cow', 'buffalo', 'moose', or 'caribou'. There are materials that have existed in some, but not all, parts of the world for centuries, such as 'gold', 'iron', 'glass', 'paper', 'leather', 'cloth', and 'wool', and, similarly, items of traditional technology and transport, such as 'wheel', 'road', and 'boat'. There is also an abundance of similar words that belong to the industrial and information ages: 'new' materials such as 'metal', 'rubber', 'plastic'; 'new' kinds of transport and technology, such as 'car', 'plane', 'train', 'engine'; 'gun'; 'telephone', 'radio', 'television', and (perhaps) 'computer'.

In relation to people's ways of living and social organization, words like 'village', 'city', and 'country' are important language-specific molecules in the modern world; social institutions such as 'school', 'hospital', and 'the law'; and words for professions such as 'doctor', 'teacher', and 'soldier'. The related words 'read', 'write', and 'book' are hugely important semantic molecules in many concepts related to modern life, not to mention 'money' and 'God'. Needless to say, many of these words and concepts, albeit language/culture specific, are not confined to a single language or culture, but are found across a broad cultural area.

The language specificity of some molecules may not be obvious to ordinary speakers of a language, especially if they are deeply ingrained in the lexicon and in everyday ways of thinking. Three pertinent examples from English and other European languages are the words 'colour', 'number', and the pair 'brother' and 'sister'. 'Colour' arguably functions as a semantic molecule in the meaning of words like *red*, *blue*, *green*, and so on. Wierzbicka (2008) contends that many non-European languages lack 'colour words' in the true sense, because their visual descriptors do not involve any comparable molecule. The semantic molecule 'number' forms part of the meaning of many quantitative and measurement terms of English and similar lan-

guages, as well as underpinning the number system (Goddard 2009). Finally, Wierzbicka (2016) argues that 'brother' and 'sister', though emphatically not lexical universals (unlike, e.g. 'mother' and 'father'), function as semantic molecules in the kinship vocabulary of many European languages, for example, in the meanings of words like *uncle* and *aunt*.

Needless to say, the discussion in this section has not been anything like comprehensive. The details of the molecule theory are still being worked through, and refinements and adjustments are ongoing. Compared with 40 years developing the core NSM of semantic primes, as yet only 10–15 years has been devoted to semantic molecules. There is still much to be learnt.

3.4.6 A Parting Note on Other Useful International Words

As mentioned in Chap. 2, there are plenty of other useful, or even essential, words for Minimal English which are not semantic molecules (or, at least, not particularly important ones) and which are not universal or near-universal either, taking the broad sweep of human history and human geography into account. Rather, they are needed in Minimal English because they are important to international discourse in the modern world. They include words that have to do with countries, government, and migration, such as 'government', 'border', 'passport', and 'vote'; words that are important for talking about health issues, such as 'medicine', 'mosquitoes', 'flies', 'salt', and 'sugar', and conflict and security, such as 'war' and 'bomb'; words needed to talk about climate change and pollution, such as 'electricity', 'oil', 'coal', 'petrol', and 'air'; natural disasters, such as 'flood', 'storm', and 'earthquake'; and cultural words such as 'newspaper', 'film', 'photo', 'internet', and 'music'.

3.5 From NSM to Minimal English

As mentioned, the Minimal English project began to take shape in 2013, impelled by Anna Wierzbicka's sense that the NSM research community had accumulated enough knowledge and experience about semantic

variation and cross-translatability that it was now practical to adapt NSM into a user-friendly tool for thinking and communicating outside the confines of Anglo English (cf. Wierzbicka 2014: Ch 14).

It would be difficult to summarize the development process of Minimal English so far, and the precise details are hardly important. A few key observations will suffice. The process began with consultations and discussions among linguists in the NSM research community, led by Anna Wierzbicka and Cliff Goddard. The starting point was the empirical findings in hand, so to speak, about semantic primes and molecules, and about shared syntax. As for what extensions were necessary to this fundamental core, decisions were guided by an inductive approach, that is, Wierzbicka, Goddard, and others began to experiment with crafting texts in Minimal English for various purposes and in different domains. Bert Peeters, Marie-Odile Junker, and Gian Marco Farese all made notable contributions to these efforts. When additional non-universal words and expressions were needed, efforts were made to identify the most translatable ways to go. In this process it was significant that the NSM research community comprises a diversity of scholars with rich experience in cross-linguistic semantics, whose importance can perhaps be likened to the importance of 'clinical experience' in medicine. Some of the early Minimal English texts eventually developed into texts that appear in chapters in this volume: the ethics scripts in Wierzbicka's Chap. 6 and the 'popular science' texts in Chaps. 8 and 9. Wierzbicka began an ambitious project now titled 'The Story of God and People' (cf. Wierzbicka 2017, forthcoming).

In 2015 a symposium titled 'Global English, Minimal English' was held at the Australian National University, with the goal of bringing the idea of Minimal English to the attention of scholars and professionals across many fields. The uptake and interest were very promising, as shown by a number of the chapters in this book. This development process—inductive and practice-based—is continuing, for example, with the collaboration with narrative medicine (cf. Chap. 11), several projects in cross-cultural and language education (cf. Peeters ed. forthcoming; Sadow 2015, 2016; Tully 2016), and literacy development and translation practice in the Pacific (cf. Hill et al. 2016).

The aim of the present chapter has been to give the non-specialist a sense of the knowledge base upon which Minimal English rests.

Appendix A: Semantic Primes, English Exponents (After Goddard and Wierzbicka 2014)

I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	Substantives
KINDS, PART~HAVE PARTS	Relational substantives
THIS, THE SAME, OTHER~ELSE	Determiners
ONE, TWO, SOME, ALL, MUCH~MANY, LITTLE~FEW	Quantifiers
GOOD, BAD	Evaluators
BIG, SMALL	Descriptors
KNOW, THINK, WANT, DON'T WANT, FEEL, SEE, HEAR	Mental predicates
SAY, WORDS, TRUE	Speech
DO, HAPPEN, MOVE	Actions, events, movement
BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING)	Location, existence, Specification
(IS) MINE	Possession
LIVE, DIE	Life and death
TIME~WHEN, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	Time
PLACE~WHERE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH	Place
NOT, MAYBE, CAN, BECAUSE, IF	Logical concepts
VERY, MORE	Augmentor, intensifier
LIKE	Similarity

Notes: • Exponents of primes can be polysemous, that is, they can have other, additional meanings. • Exponents of primes may be words, bound morphemes, or phrasemes. • They can be formally complex. • They can have language-specific combinatorial variants (allolexes, indicated with ~). • Each prime has well-specified syntactic (combinatorial) properties.

Notes

1. The only other linguists who clearly acknowledge the importance of semantic metalanguage, and have done so since the mid-1960s, are the Moscow Semantic School's leading figures Jurij Apresjan and Igor Mel'čuk. In his book *Systematic Lexicography*, Apresjan (2000: 224) explains: '[T]he metalanguage of lexicography is a sub-language of the object language, comprising a relatively small and unified vocabulary

and syntax. The basis of this metalanguage is semantic primitives. With the aid of the metalanguage, complex semantic units of the object language (grammatical as well as lexical) are reduced to a fixed structure of semantic primitives by a process of hierarchical breakdown'.

2. In some ways, the NSM approach can be seen as following the tradition of lexicography, but, by taking a much more systematic approach, striving to avoid the many pitfalls of conventional lexicography (Wierzbicka 1996: Ch 9; Goddard in press/2017). Aside from circularity and the 'pseudo-defining' of relatively simple words in terms of more complex ones, perhaps the most common fault of conventional dictionary-making is not distinguishing invariant meaning from contextual enrichment, leading to the postulation of unlikely dozens of 'senses'. Another common flaw is reliance on open-ended terms such as usu. (usually) or esp. (especially) and the so-called lexicographer's crutch, the all-purpose 'etc.'
3. Written mainly in Latin, they were compiled by his editor, after Leibniz's death, as his 'Table de definitions' (see Leibniz 1903: 437–510).
4. If one had to nominate a single benchmark in the intervening period, that distinction would fall to Wilhelm von Humboldt (1767–1835), one of the founding figures of modern comparative linguistics and anthropological linguistics. Humboldt tended to be more interested in culture-unique words than in universal words, on account of his interest in folk (ethno-national) cultures. '[E]ach language draws a circle around the people to whom it adheres which it is possible for the individual to escape only by stepping into a different one'. Even so, he also wrote: 'To be sure, a midpoint, around which all languages revolve, can be sought and really found, and this midpoint should always be kept in mind in the comparative study of languages, both in the grammar and lexicon'.
5. Established NSM researchers, roughly arranged into chronological waves, include (i) Bert Peeters, Felix Ameka, Jean Harkins, Cliff Goddard; (ii) Zhengdao Ye, Jock Wong, Anna Gladkova, Rie Hasada, Deborah Hill, Kyung-Joo Yoon, Marie-Odile Junker; (iii) Carsten Levisen, Maria Auxiliadora Barrios Rodriguez, Sandy Habib, Ulla Vanhatalo, Yuko Asano-Cavanagh, Carol Priestley, Zuzanna Bułat-Silva; and (iv) Helen Bromhead, Adrian Tien, Radoslava Trnavac. Recently completed PhDs include Lien Huong Vo, Helen Leung, and Gian Marco Farese.
6. To be precise, one would first have to expand 'A happened after B' to 'B happened at some time, A happened after'. Then, it could be claimed that the latter is equivalent to 'A happened at some time, B happened before'.

7. When the exponent of a prime is polysemous, the intended primitive meaning can always be made perfectly clear by reference to key grammatical frames (see section 3.3) in which it occurs, but from which the other meanings are excluded.
8. To give an example which will be less familiar to many readers, there are plenty of languages in which the prime SOMETHING has two or more exponents. A typical pattern is for one exponent to be used across a wide range of contexts, while another occurs only when SOMETHING is the complement of a particular verb, such as DO or SAY. Persian (Farsi) is one such language. The main exponent of SOMETHING IS *čiz(i),* but as the complement of DO, the allolex *kār* (lit. 'work') is used (Arab 2016).
9. This formulation, using 'now', is an over-simplification, as the real implicit reference point is the time of speaking, that is, 'when I say this now'.
10. Equally it is interesting to note that there is much variation in how many molecules (if any) are required in explications. Many explications require no molecules at all and others require only one or two. Explications for common verbs of 'doing and happening' (Goddard and Wierzbicka 2009, 2016b) usually require a handful. Explications for concrete nouns, on the other hand, require significantly more. Wierzbicka's (2015) explications for English *spoon* and Chinese *tangchí*, for example, use about 15 molecules per explication.
11. Some might wonder: what about 'animal'? Actually, this word is much more English specific than 'creature' and much less cross-translatable. Even in languages as close to English as Danish and German, the normal translation equivalents for *animal* (Danish *dyr*, German *Tier*) are closer to 'creature', insofar as they are used freely about spiders, fish, and so on.
12. In English and many languages, this meaning exists as a distinct sense of the exponent of KNOW, but it is well known that many other languages have a distinct verb for 'know (someone)', for example, German *kennen* and French *connaître*. NSM researchers once believed that the two verbs in French and German, for example, were allolexes but it has become clear that 'know (someone)' can be explicated, as shown (Wierzbicka in press).

    I know this someone:
    I know some things about this someone
        because I was with him/her for some time before
    because of this, I can think like this: "he/she is like this"

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4

Minimal English and Diplomacy

William Maley

4.1 Introduction

There is a story that during the Malayan Emergency, the British High Commissioner, General Sir Gerald Templer, originator of the counterinsurgent tactic of 'winning hearts and minds', sought to engage with a particularly uncooperative group of villagers. Not speaking Hokkien, he was obliged to rely on an interpreter. He decided to be particularly blunt: 'I know you're a pack of bastards, but I'm a bigger bastard than you are'. The interpreter rendered this warning as follows: 'Sir Gerald is aware that your parents were not married, but he would like you to know that his parents were not married either'.[1] Here we find a very neat illustration of a problem that has plagued diplomacy for several millennia: communication is at the heart of the diplomatic enterprise, yet with thousands of languages being used in the world, the risk of miscommunication through mistranslation or misinterpretation is ever-present, with potentially dire consequences.

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There is no magic solution to this problem, and political leaders are typically the last persons to whom one should turn to solve it. Many have no grasp whatever of the problems that can arise. Famously, British Prime Minister Neville Chamberlain negotiated with Hitler in Germany during the 1938 Czechoslovak crisis without even taking a professional interpreter of his own to the meetings (cf. Reynolds 2007: 53); and stories are legion of politicians in international negotiations making use of elaborate sporting metaphors that are virtually untranslatable as they depend on the listeners having an understanding of both the rules and history of the game. Nonetheless, from the discipline of linguistics, and specifically from a range of developments in semantic analysis, there are a number of profound insights that can be given some practical application in the diplomatic sphere—to ameliorate some of the challenges of communication, even if not to overcome them entirely. Drawing links between these insights and the worlds of diplomacy is the focus of this chapter. It is divided into seven sections. The first gives an outline of some of the ways in which the word 'diplomacy' is understood and of the institutions that have developed to underpin diplomatic activity. The second looks at diverse forms of diplomatic communication: face-to-face, in written texts, and via mass media. The third examines some peculiarities of language used in diplomacy. The fourth takes up specific issues of interpretation and translation, and the fifth turns to the question of what may be gained through looking at insights from the Natural Semantic Metalanguage (NSM) approach and from the evolving discussion of 'Minimal English'. The sixth takes as an example the communications issues that arose as a result of the October 1962 Cuban Missile Crisis. The final section offers some brief conclusions.

4.2 The Character of Diplomacy

Diplomacy is a social practice of great antiquity (cf. Black 2010; Cohen 2013; Berridge 2015). The earliest evidence of diplomatic engagement comes from several thousand years before the time of Christ, and by the time that city-states emerged in ancient Greece, engagements between such actors were becoming increasingly regulated by an array of norms

and understandings (Bederman 2001). Many histories date the flourishing of diplomacy from the era of Italian city-states during the Renaissance, when envoys were commonly dispatched with messages from princes to other rulers and potentates. Some of the customary international law of diplomacy evolved during this period, as did some of the conventions of communication that persist to this day. Modern diplomacy, however, owes much of its shape and character to the development of bureaucratic instruments for the pursuit of foreign policy objectives (Roberts 2009), most famously in France under Cardinal Richelieu, who is credited with founding the first Foreign Ministry, and then in Great Britain with the establishment of the so-called Northern Department to handle foreign policy matters. Within a relatively short period of time, foreign ministries had become so entrenched that shorthand labels for the foreign ministries of different countries came to be used—such as the Choristers' Bridge for Imperial Russia, the Quai d'Orsay for France, the Wilhelmstrasse for Germany, and the Sublime Porte for the Ottoman Empire.

That said, identifying the defining features of *diplomatic* activity is a less than straightforward undertaking, not least because the term 'diplomacy' itself has been used in a number of different ways. The late Hedley Bull (1977), in his justly famous book *The Anarchical Society*, noted three distinct usages. One treated 'diplomacy' as simply the activity carried out by diplomats, but the problem of circularity in any such definition is plain to see. Another referred to activities carried out in a tactful or 'diplomatic' way. This is hardly irrelevant to diplomacy—Winston Churchill once referred to US Secretary of State John Foster Dulles as the only bull who took his own china shop with him—but runs up against the difficulty that on occasion it is a requirement of effective diplomacy to be bluntly forthright, even if it offends the recipient of a message. For this reason, Professor Bull favoured the third usage, which referred to the peaceful conduct of relations between states.

Identifying the central elements of diplomacy in this sense carries us somewhat further. In an important analytical study, Jönsson and Hall have highlighted three dimensions of activity that is distinctively diplomatic (Jönsson and Hall 2005: 119–135; cf. Bull 1977: 162–163). One is representation. Diplomats play representative roles in both practical and symbolic senses. In a practical sense, an embassy or high commission

is a very busy office, with staff involved in a range of tasks including political reporting, the preparation of materials for use in so-called public diplomacy, and the provision of consular assistance to travellers in need. Such diplomatic missions also provide office support for visiting ministers, senior officials, and politicians. Yet beyond these practical tasks, the mere presence of an ambassador or a high commissioner points to the distinctive status of the power that has dispatched such a representative to the territory of a receiving state, and associated with such dispatch go a range of privileges and immunities outlined in detail in the *Vienna Convention on Diplomatic Relations* of 1961 (Denza 2016). This points to the second dimension of diplomatic activity, which is reproduction of international society. To the extent that there is a society of states, it is constituted through the development of norms, traditions, and understandings that shape the behaviour of relevant actors and make it predictable. Diplomatic practice is one of the central elements of this process, which is why considerations of protocol, which emphasizes the sovereign equality of states, have an importance that is easily overlooked. The third element, and from our point of view perhaps the most important, is communication. Diplomatic channels provide a means by which messages can be conveyed between states, and keeping such channels open and functioning may be critical in avoiding catastrophic developments in international relations such as the outbreak of war. For this reason, the severing of diplomatic relations, which usually entails a shutting-down of such direct lines of communication, is usually seen as a last-resort measure.

One other point to note at this stage is the following: diplomacy as an activity has historically been marked by a certain taste for ambiguity. The temptation, or the tendency, to use ambiguity in language as a way of papering over a failure to reach solutions to problems by diplomatic means has always been present. Indeed, one of the most famous definitions of an ambassador, namely, that advanced in the seventeenth century by Sir Henry Wotton, embodies just such an elegant ambiguity. An ambassador, he remarked, is 'an honest man sent to lie abroad for his country'. Does 'lie abroad' mean 'be based abroad', or 'tell lies abroad'? Wotton left the question hanging, and effective translating and proficient interpreting may need to be able to capture such ambiguity if they are to serve their users' purposes.

4.3 Forms of Diplomatic Communication

Diplomatic communications come in a number of different forms, both spoken and written. They occur at the apex of political systems when heads of state come together in formal summits, but they are also a feature of routine, day-to-day discussions between ambassadors, less senior diplomats, and other officials, sometimes reflected in so-called *notes verbales*. Increasing through what is called 'public diplomacy', messages are being directed not at a narrow club of trained 'diplomatists' but at the wider publics of states (Hayden 2010). In the twenty-first century, English is now the most commonly used language of diplomacy, and in some forums, such as the Association of Southeast Asian Nations (ASEAN, cf. Chap. 5, this volume), it is the standard language of engagement given the diversity of local languages spoken across Southeast Asia (Goddard 2005). A Foreign Ministry such as that of Indonesia, which receives roughly 25,000 online applications a year from potential recruits, is in the happy position of being able to treat functional command of English as virtually a baseline requirement for an application to be considered. But that said, it should not automatically be assumed that English is the same everywhere. ('In America they haven't used it for *years*', as Professor Higgins remarked in the musical *My Fair Lady*.) And if the English spoken as a native language in the United Kingdom, the United States, Canada, Australia, and New Zealand can vary in subtle ways, it can vary quite markedly between speakers in those places and in countries such as Singapore (Wong 2014).[2]

Direct, unstructured *negotiations* between heads of state have become relatively rare; officials rightly fear that untutored leaders may lapse into the use of speech-act verbs without appreciating all the ramifications. As a result, extensive officials' meetings typically precede such encounters, laying the groundwork for outcomes that match the expectations of the participating parties. On the other hand, *conversations* between senior leaders and foreign ministers are becoming more and more common, facilitated by cellphone technology. Problems of misunderstanding are more likely to arise from the lack of proper records of such discussions than from interpreting errors.

On the other hand, the pace of diplomatic communications has picked up enormously in a number of great leaps since the nineteenth century. The old *full* title of an ambassador—'Ambassador Extraordinary and Plenipotentiary'—reflected the need for an ambassador to be given full negotiating authority since it was not possible in premodern times for ambassadors to seek additional instructions from their superiors during the course of a negotiation. This was changed strikingly by the advent of the telegraph in the nineteenth century (Nickles 2003), followed by the telephone in the twentieth and new forms of communication such as electronic mail that are now ubiquitous in the twenty-first. These all had their teething troubles: a cherished 1920s cable from the British Legation in Athens on rioting in the Greek Orthodox monasteries of Mount Athos reported not that 'The monks are violating their vows', but rather that 'The monks are violating their cows', prompting Harold Nicolson to offer the marginal comment that 'This would seem to be a case for a papal bull' (Chamberlain 1935: 311). Nonetheless, all settled down in time, changing the mechanics of diplomacy if not necessarily its core dimensions.

Diplomatic communications can vary dramatically in their degree of formality. On occasion, diplomatic messages have been conveyed simply through the mass media of a country, in the form either of leadership broadcasts or statements to the press. On the other hand, messages can be sent in a highly structured format grounded in quite grandiose terms. On 8 December 1941, following the Japanese attack on Pearl Harbor and strikes against Malaya, Singapore, and Hong Kong, British Prime Minister Churchill sent a letter to the Japanese ambassador which concluded that 'His Majesty's Ambassador in Tokyo has been instructed to inform the Imperial Japanese Government in the name of His Majesty's Government in the United Kingdom that a state of war exists between our two countries. I have the honour to be, with high consideration, Sir, Your obedient servant, Winston S. Churchill'. Churchill in his memoirs recorded that 'Some people did not like this ceremonial style. But after all when you have to kill a man it costs nothing to be polite' (Churchill 1954: 476–477).

Some diplomatic endeavours (either bilateral or multilateral) are focused on the development of agreed written texts. These can range from communiqués issued at the end of the meeting, to non-binding

Memoranda of Understanding, to a fully fledged treaty, defined in Article 2.1(a) of the *Vienna Convention on the Law of Treaties*, as 'an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation' (Brownlie 2009: 270–297). Article 31.1 of the *Vienna Convention* additionally provides that 'A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose'. But it takes more than such a provision to overcome potential disputes of interpretation, and problems can become even more complex if there are a number of equally authoritative texts of a treaty in different languages that may be parsed for the purpose of extracting particular meanings. This also arises in the context of UN diplomacy where a range of official languages are used, and this is no trivial problem; for the best part of 50 years, disputes have raged over the interpretation of Security Council resolution 242 dealing with the aftermath of the 1967 Six-Day War.[3]

The distinction between written and spoken communication is significant, but it is important also not to lose sight of the reality that these are only part of a wider family of signals that are important elements of diplomacy, especially in a crisis. Coral Bell defined a signal as a 'threat or offer communicated to the other party or parties' and went on to make the obvious point that 'Such signals are not necessarily verbal messages. Some of the sharpest and most effective of them are movements of military resources of various kinds' (Bell 1971: 73). In diplomacy, especially of the coercive variety, actions can indeed speak louder than words.

It is also important to remember that diplomacy is classically what Robert D. Putnam has characterized as a 'two-level game' (Putnam 1988), and there may therefore be multiple audiences, both international and domestic, for diplomatic pronouncements. This is especially the case when politicians rather than bureaucrats are taking the lead on a particular issue. The temptation to speak primarily to a domestic audience is likely to be strong, and the ramifications can be severe if the effect is to give offence to international counterparts—they may understand the nature of the temptation, but nonetheless seek to magnify the scale of their apparent anger as a way of extracting concessions.

4.4 Diplomatic Language: Diplomatic Style and Ethnopragmatics

Both domestically and internationally, the choice of which language or languages to privilege is potentially a highly contentious one (Pool 1991). The Yiddish saying that a language is a dialect with an army and navy (*A shprakh iz a dialect mit an armey un flot*) serves as a potent reminder of this point. On occasions, a partial solution to this problem has arisen through the development of very particular ways of expressing points that then become part of the standard discourse of particular professions, the law and medicine being obvious examples (Maley 1987; Khadra 2007: 275). Diplomacy has also gone down this path. An insightful recent study argues that 'diplomats require a non-abrasive manner of communicating that lubricates, rounds-off the sharp edges, and creates the space for saving face and creating possibility … Diplomats, as political actors, are deeply embedded in a social context that privileges careful, controlled and cautious behaviour. Their language is an expression of their practice' (Oglesby 2016: 243). This is well captured in Ed Fisher's *New Yorker* cartoon of one diplomat lying prostrate at the UN as another strides angrily away: the caption read 'I used a standard obscure diplomatic code-word, but perhaps it wasn't obscure enough' (Mankoff 2010).

But that said, recent developments in both the study of diplomacy and in cross-linguistic semantics provide warnings against carrying too far the notion of a shared and distinctive diplomatic language that can effectively protect against the problems of miscommunication. From semantics, and specifically from ethnopragmatics, comes the reminder that different languages reflect a diverse range of cultural scripts, where 'cultural script' refers to 'a statement – framed largely or entirely within the non-ethnocentric metalanguage of semantic primes – of some particular attitude, evaluation, or assumption which is hypothesized to be widely known and shared among people of a given speech community' (Goddard 2006: 5). The reason for caution is that the mere fact that diplomats may be members of a *diplomatic* 'speech community' does not preclude their being members of other speech communities as well, and the interplay between the two can lead to contrasting rather than congruent modes of diplomatic activity and expression.

This most commonly surfaces in the form of distinctive diplomatic *styles*, reflected both in what people say and how they say it. The phenomenon is one of which professional diplomats have long been broadly aware. In his detailed study of international conferencing, Ronald A. Walker, a very experienced negotiator and conference chair, devoted an entire chapter to national styles. 'Just as the personalities of individual delegates matter in multilateral conferences', he wrote, so do the "personalities" of national delegations' (Walker 2004: 241). The practical importance of these differences can be appreciated from the following observations that Walker offers:

> the US, more perhaps than any other country except Israel and the DPRK, when it is displeased with what the rest of the planet says or wants, is inclined to dig its heels in and say NO … arguing with Chinese tends to be unproductive: your interlocutor seems to focus on refuting your arguments rather than on listening … French representatives have particular skill at arguing their objectives in the form of principles and broad concepts of wide appeal … [Japan] conveys a sense of being ill at ease in the international environment and of nurturing an unrequited longing for more deference than it receives. (Walker 2004: 230, 233–4, 240)

These may be learned behaviours in a specific organizational context, but they may equally reflect wider cultural dispositions. Carrying this discussion further from a theoretical point of view, Jeffrey Robertson, who defines diplomatic style as 'the replication in behaviour, or the artefacts produced by behaviour, that results from choices made within the constraints specific to diplomatic interaction' (Robertson 2016: 53), has identified four ideal types of diplomatic style, which he labels 'rational purposive oriented', 'traditional', 'effectual or emotion oriented', and 'value oriented' (pp. 71–91). These may also reflect wider cultural dispositions.

An excellent example of problems that can arise when different cultural scripts or diplomatic styles encounter each other came on 23 October 2005 in a speech given by the new president of Iran, Mahmoud Ahmadinejad, who, quoting the founder of the Islamic Republic, Imam Khomeini, remarked that 'our dear Imam proclaimed that the occupier-regime of Jerusalem should be effaced from the page of time' (*Imam-e aziz-e ma farmudand keh in rezhim-e ashghalgar-e Quds baid az safheh-i*

ruzgar mahv shavad). This complex figurative formulation (Sharifian 2009: 420–421) was translated into English as a threat to wipe Israel off the map and triggered international condemnation. What the discussion almost entirely missed was any sense of the linguistic context: that English frames of interpretation could not simply be imposed on a speech delivered in Persian, in which Persian cultural scripts were the relevant ones to note. Given that Israel and its supporters were poised to pounce on anything that might vindicate their sense that Ahmadinejad posed a unique danger, it may have been only a matter of time before this happened; but it certainly put paid to any prospects for a US-Iranian rapprochement in the short term. As a foreign minister once remarked, in international politics, words are bullets.

4.5 Interpretation, Translation, and Diplomacy

Interpreting classically involves the rendering of the spoken word from one language to another, whether sequentially, 'simultaneously' through headphones, or in the whispered form known as *chuchotage*. Translating classically refers to the rendering of a printed text from one language to another (or a range of others). The regularly cited cardinal rule of both is that the rendition be accurate—although on occasion sheer requirements of tact can lead practitioners to depart from the rule, at least momentarily (cf. Slater 2008: 5). It is also the case that the finest translations may move beyond the literal in order to capture the rhythm and structural features of a text—Edward Fitzgerald's nineteenth-century rendering of the *Rubaiyat* of Omar Khayyam being a famous example (see Nicholson 1922). This may be less important in diplomacy than in literature, although on occasion the form of a text may help to shed light on how it might properly be understood.

In the sphere of diplomacy, there have often been superb practitioners who have been superbly accomplished linguists as well. Until relatively recently, a solid command of French was seen as an important qualification for high diplomatic office, and it may still be necessary for aspirants to the position of UN Secretary-General to have at least some command

of French, if only to avoid the risk of a French veto in the UN Security Council when a Secretary-General is being chosen. Important practitioners and commentators on diplomacy and diplomatic history such as Duff Cooper and Harold Nicolson were notable for their excellent spoken and written French; and it is often forgotten that Field Marshal Sir Alan Brooke, Chief of the Imperial General Staff in Britain for much of the Second World War, was born in France, lived there until he was sixteen, and spoke impeccable French, to his considerable advantage when crucial negotiations were being held in Brussels before the fall of France in 1940 (Danchev and Todman 2002: 61).[4] Examples of this kind can be readily multiplied; Israel's Foreign Minister at the time of the 1967 Six-Day War, Abba Eban, had been a Tutor in Arabic at Cambridge University where he was a Fellow of Pembroke College before the Second World War. A command of languages, however, is not the same as political understanding. Sir Anthony Eden, British Prime Minister at the time of the 1956 Suez crisis, had studied Oriental languages at Oxford University and to the end of his life read Persian poetry for pleasure; but as the 1956 crisis demonstrated, this did not give him much insight into the nationalisms that were increasingly swirling around the Middle East.

There are in fact good reasons for using interpreters and translators even if one has studied the language or languages of other parties to a negotiation. One is that the interpolation of the interpreting process can give a negotiator who speaks several languages an opportunity to gather his or her thoughts while the interpreter is speaking. In sensitive negotiations, this often serves as a protection against responses voiced on the basis of insufficient reflection.[5] But another, more serious, is that those using a second language may inadvertently use terms that can be understood in various ways, without appreciating that they have done so. A powerful example of this problem was to be found in the discussions that British Prime Minister Winston Churchill held with the French Premier Paul Reynaud as the fall of France loomed in June 1940. The specific episode is described in a recent biography of Churchill by Roy Jenkins, who served as President of the European Commission and had a very clear understanding of the perils of working in a multilingual environment. He recounted that a: '… somewhat serpentine French high official … was putting it about that Churchill, when asked in a private

conversation with Reynaud what would be the British attitude to France's inability to continue the struggle, had said "Je comprends"'. But this, it was strenuously asserted on the British side, meant no more than that he had understood the dilemma which Reynaud was putting to him, maybe indeed no more than that he understood his French, and certainly not that he agreed to the abrogation of the solemn Anglo-French agreement against either ally making a separate peace.

When de Gaulle and a few others heard of this confusion, they were horrified. If Churchill was agreeing so easily, it undermined the position of those on the French side still advocating resistance. The episode was a classic example of the dangers of speaking at crucial moments a language of which the speaker is not in perfect command (Jenkins 2002: 617–618).

This is one of the reasons why the professions of interpreter and translator have become entrenched in the work of international organizations, which frequently have several languages designated as official. But even professional translators, often working under intense pressure, can run into difficulty. At the 1945–46 Nuremberg Trial, the US Chief Prosecutor, Mr Justice Jackson, was hugely embarrassed in his cross-examination of Hermann Goering when he confronted the defendant with a document, the translation of which confused the 'liberation' of the Rhineland (which would have violated the Treaty of Versailles) with the 'clearing' of the waters of the Rhine river (Taylor 1993: 337).

4.6 Natural Semantic Metalanguage, Minimal English, and Diplomacy

Avoiding gross errors of interpretation or translation in many cases involves no specialized knowledge of linguistics, but simply a sufficiently rich vocabulary. This, however, is not invariably the case. Some words in one language have no direct or obvious equivalent in another, in which case the question of how to translate or interpret such words immediately arises; the German word *Angst* provides a good example (Wierzbicka 1999: 123–167). It is also the case that some words may appear to have direct equivalents that on closer scrutiny prove inadequate to capturing

the meaning of a particular word when it is used by native speakers; the word 'freedom' falls into this category (Wierzbicka 1997: 125–155). How might such complex meanings be conveyed by speakers of one language to speakers of another?

Addressing this question has been the focus of one of the most interesting and creative research programs in modern semantics, namely, the identification and development of a 'Natural Semantic Metalanguage' or NSM that can be mobilized to convey idiosyncratic meanings in an accessible fashion. This particular paradigm, pioneered by Anna Wierzbicka and Cliff Goddard, has two basic constitutive steps. Its fundamental underlying foundation is the proposition that there exist 'semantic primes', that is, 'simple universal concepts that are embedded in the lexicons of all (or most) human languages'. Current research has identified 65 such 'word-meanings' (Goddard and Wierzbicka 2014: 11–12). The next step is the proposition that these word-meanings can be assembled in 'explications' designed to capture the complexities or idiosyncrasies of particular terms. These explications themselves are based upon scrutiny of the use of the term to be explicated by native speakers in actual recorded sentences. Thus, the NSM approach is one that is empirically grounded—and as a result, particular explications can be tested by reference to examples of usage. An accessible example of such a formulation can be found in Wierzbicka's (1997: 154) rendering of the meaning of the English word 'freedom':

(a) Someone (X) can think something like this:
(b) If I want to do something, I can do it
(c) No one else can say to me: 'you can't do it because I don't want this'
(d) If I don't want to do something, I don't have to do it
(e) No one else can say to me: 'you have to do it because I want this'
(f) This is good for X
(g) It is bad if someone cannot think this

The NSM methodology has now been used extensively to explicate a range of complex terms in simple language (cf. Wierzbicka 1996, 2003, 2014; Goddard 2011),[6] including political language, terminology, and

slogans. It offers a practical response to the challenge that the ethnopragmatic perspective presents. A recent study by Ye (2013) also points to potential uses to which the approach may be put by diplomats: she uses NSM to explicate the meaning of the Chinese expression translated as 'an old friend of the Chinese people'. The terms 'friend' and 'friendship', as Wierzbicka has put it, 'are English words, embodying concepts which are cultural artifacts of the society which created them' (Wierzbicka 1997: 33), and when a word such as 'friend' appears in translation from a Chinese diplomatic formula, it is important to analyse it in detail in order not to misunderstand what it means.

But that said, NSM explications are not for everyone, and almost certainly not for senior politicians, diplomats, or bureaucrats—unless they have genuine fascination with languages and their complexities or a love of words (Burnside 2004; Gowers 2016). The busy official is likely to regard an NSM explication as somewhat 'clunky' and to doubt the utility of the approach. Professional translators and interpreters, on the other hand, are likely to find NSM explications extremely illuminating. But neither in translating or interpreting can such explications easily be inserted directly into a text of the kind that clients in diplomacy will look to receive. Some other, somewhat looser approach, may better serve such needs.

It is here that the idea of Minimal English comes into its own. As the chapters in this collection make clear, Minimal English is a work in progress and therefore much less developed than NSM. As a set of perhaps 200 words with NSM at its core, Minimal English offers more flexibility than NSM, even at the cost of moving beyond the use of semantic primes to include terms that are more molecular than atomic in character. The justification for this lies in the ultimate purpose of Minimal English, which is to provide what Cliff Goddard and Anna Wierzbicka have called 'a global minimal lingua franca for the elucidation of ideas and explanation of meanings – and not only in scholarship but also in international relations, politics, business, law, ethics, education, and indeed in any context where it is important to explain precisely what one means' (Goddard and Wierzbicka, this volume, Chap. 2). Minimal English is not the same as 'Basic English': it is not a collection of 'simple' words, but rather of words with counterparts in many other languages, of a kind that facilitates translatability.

4.7 A Case Study: The Cuban Missile Crisis and Post-crisis Innovations

The ongoing importance in diplomacy of translatability can be demonstrated through a discussion of one of the most dramatic moments in the post-World War II era, namely, the October 1962 Cuban Missile Crisis, and some developments that occurred in its aftermath. At the outset, it is important to note that crises pose challenges for diplomacy that are largely avoided in the course of routine interactions. They often involve high risk of serious conflict, as well as acute time pressure, and a centralization of decision-making (Lebow 1981; Richardson 1994; Acuto 2011). Furthermore, while texts that record the terms on which crises are resolved often contain a degree of ambiguity, crises are episodes in which the use of the wrong words in negotiations *during* a crisis may have incalculable consequences. This was certainly the case in October 1962.

Crises tend to have their own prehistories, and this was certainly the case in respect of Cuba. US–Soviet relations had grown very tense. Even before the inauguration of President John F. Kennedy in early 1961, the 1 May 1960 shooting down over the USSR of a US U-2 spy plane piloted by Francis Gary Powers had scarred the relationship between US President Eisenhower and Soviet Premier Nikita Khrushchev. In April 1961, the new president had been humiliated by the failure of the so-called Bay of Pigs incursion into Cuba, designed to precipitate the fall of the radical Fidel Castro who had taken power in the United States's island neighbour in 1959; and in June 1961, Kennedy had received a verbal battering from Khrushchev during a summit meeting in Vienna. On 14 October 1962, the United States obtained photographic evidence that the Soviet Union was building ballistic missile launch sites on Cuba that would allow US cities to be struck by nuclear weapons with very little warning. In a nationally televised address on 22 October, President Kennedy announced that a 'quarantine operation' was being put in place to prevent the delivery of offensive weapons to Cuba. This avoided an immediate invasion of Cuba, of the kind advocated by the US Joint Chiefs of Staff, but led to grave fears of a US-Soviet confrontation that were only partially dispelled on 24 October when Soviet vessels halted. Finally, on 28 October, and

after extensive and complex discussions through various channels, Khrushchev announced that the Soviet Union would withdraw the weapons on Cuba. The announcement took the form of a broadcast on Radio Moscow, since the Soviet perception was that to reply by 'coded diplomatic cable' would take too long (Dobbs 2008: 324). It later became clear that Kennedy had agreed to withdraw US-supplied Jupiter missiles from Turkey, but the announced quid pro quo was a US commitment not to invade Cuba or allow attacks on Cuba from US territory (cf. Allison and Zelikow 1999; Stern 2012).

In Stanley Kubrick's satirical 1964 movie *Dr. Strangelove*, there is a scene in which US President Muffley, played by Peter Sellers, speaks by telephone at the height of a nuclear crisis with the Soviet leader, 'Dmitrii'. It rather amusingly illustrates the dangers of direct conversation between top leaders, but it had no basis in the realities of the earlier Cuban Missile Crisis. Nonetheless, during the Missile Crisis, President Kennedy found it necessary to move well beyond established diplomatic channels of communication in order to send messages to Khrushchev. One example was his prime-time television broadcast, but another was his use of his younger brother, Attorney-General Robert F. Kennedy, as a channel for communication via the Soviet Ambassador to the United States, Anatoly Dobrynin, with whom Robert Kennedy met surreptitiously on a number of occasions during the crisis. None of these channels seemed equal to the need for quicker ways of communicating in a fast-moving crisis. By the time the Cuban crisis concluded, there was a growing recognition that the means of communication that had been available require significant augmentation, specifically to allow more direct but *measured* communications between the US president and his Soviet counterpart.

The result was the so-called Hotline Agreement of June 1963, designed to facilitate direct communications between US and Soviet leaders. The 'Hotline' that was put in place between Washington and Moscow was *not*, however, a telephone. From 1963 to 1986, it was a teleprinter; from 1986 to 2008, it was a fax machine; and since 2008 it has been a computer link for electronic mail communication. The crucial feature of the hotline that makes it interesting from a linguistic point of view is that messages are sent from Washington in *English*, and messages are sent from Moscow in *Russian*. Translation then takes place in the recipient

capital. It is therefore extremely important that messages be crafted in such a way as to maximize the prospects of accurate translation by the recipients—which is where Minimal English may have an important role to play, since Minimal English is a tool not just for translation but for the preparation of sensitive or critical texts in *anticipation* of their having to be translated. And in some respects, there may be scope for a special form of Minimal English, since it is not translatability into all languages that matters, but translatability specifically into Russian. (There are two other hotlines in operation, one a phone-link on the Korean peninsula between Seoul and Pyongyang maintained by the Red Cross and the other a South Asian hotline between New Delhi and Islamabad. They do not, however, give rise to significant linguistic challenges, since the former is for the use of native speakers of Korean and the latter links speakers of Hindi and Urdu whose 'languages' differ mainly in the script with which they are written rather than in their grammar or vocabulary.)

4.8 Some Conclusions

The above discussion suggests that the uses to which NSM and Minimal English can be put are more likely to be indirect than direct. For interpreters and translators operating under high pressure, the value of these approaches is that they can highlight complexities of communication that might otherwise go unnoted, leading to a recasting of formulations that might hitherto have seemed uncontroversial. Where Minimal English comes into its own is when a formulation needs to be assembled that runs little risk of mistranslation, and here, the hotline provides us with one potential example. It is not, however, the only one, and in conclusion, I would highlight three other areas where Minimal English might potentially be used.

The first relates to engagement with actors that have little familiarity with either the norms or the vocabulary of classical diplomacy. Some of these may be nonstate actors, who increasingly figure in processes of engagement in which professional diplomats take part. Others maybe people playing new roles in state structures. In 1993 in Cambodia, following the largest and most complex peace operation in the history of the

United Nations, a new constituent assembly gathered with the task of drafting a new constitution for the country (Doyle 1995).

However, the United Nations had given little attention to the complexities of *this* task, given how much effort was required to hold the free and fair election for the assembly itself. A result was that many members of the new assembly had little clue what it was that they were to do or indeed what a 'constitution' was. Fortunately, the Chief Electoral Officer for the UN mission, Professor Reginald Austen, formerly Professor of Public Law and Dean of the Faculty of Law at the University of Zimbabwe, put together—out of the goodness of his own heart—a text describing the character and nature of a constitution that was designed for translation into Khmer on the basis of principles very similar to those underpinning the Minimal English project. Minimal English potentially could contribute usefully to the development of similar future documents.[7]

A second and related area is that of use of language in transitional processes, again an area of activity where diplomats are likely to be involved (Chesterman 2004; Caplan 2005; Maley 2006). It is not unusual for languages in states undergoing such transitions to be undersupplied with terminology to capture the complexities of what is being attempted. More than 40 years ago, Waziri highlighted the difficulty in Afghanistan of diagnosing depressive illness, because Afghan languages were not rich in the terminology that would convey 'depression' (Waziri 1973). A recent study by Borhan Osman has pointed to similar difficulties in more recent times as international actors in Afghanistan have struggled to find local terms for activities such as 'money laundering', 'patronage politics', and 'transitional justice'. At best the forms that have been produced have been somewhat clumsy and on occasion, as in the use of *adalat-e intiqali* for 'transitional justice', thoroughly misleading—since the literal meaning of this Persian expression is 'temporary' or 'interim' justice (Osman 2015).

A third area of potential use of Minimal English comes in areas such as civic and voter education in transitional contexts. Given the prevalence of non-literacy in many societies in transition, cartoons and other graphics may well be preferred media of the communication; but as the experience of Radio UNTAC in Cambodia in 1992–93 shows, there is also

space for communication using words and sentences, and here Minimal English can inform the endeavour in constructive ways.

All that said, it is important in conclusion also to recognize the limits that are at play in the world of diplomacy. Diplomacy is an intensely political activity, and effective communication is only one part of a larger story, in which the values and interests of different states and other actors may be fundamentally at odds with each other. It cannot spin straw into gold. There were serious problems of miscommunication between Adolf Hitler and Neville Chamberlain in 1938, but this was not what ultimately caused war to break out in 1939. Better communication is highly desirable, but it is not a magic wand or panacea for solving the problems of the world. Dag Hammarskjöld, Secretary-General of the United Nations from 1953 to 1961, once remarked that the goal of United Nations was not to take everyone to Heaven, but to stop them from going to Hell. This is probably a good way of thinking of uses to which Minimal English potentially could be put.

Notes

1. A somewhat gentler version of this anecdote can be found in Barber (2004: 216).
2. A valuable collection of essays which also illustrates this point can be found in Besemeres and Wierzbicka eds. (2007).
3. For an example of how such disputes can be prosecuted, see McHugo (2002).
4. Another notable British general, Lieutenant-General Sir Adrian Carton de Wiart, had a similar upbringing and confessed that he thought more often in French than English: see Amery (1973: 417).
5. I owe this point to a very experienced and accomplished Australian official, who had an imperfect but engaging grasp of five languages other than English.
6. To this list one can add substantial specialized works by researchers such as Anna Gladkova, Jean Harkins, Bert Peeters, Jock Wong, and Zhengdao Ye.
7. This writer prepared a similar document for translation into Persian and Pushto for the benefit in 2003 of the Constitution Drafting Commission of Afghanistan: see Maley (2003).

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5

Internationalizing Minimal English: Perils and Parallels

Nicholas Farrelly and Michael Wesley

5.1 Language in International Affairs

Now that French is no longer diplomacy's lingua franca, the centrality of English to the practice and study of international relations is taken for granted. In conferences, seminars, communiqués, emails, briefings, discussions, and conversations, English has gained the upper hand. Its idioms are used and abused, and its absorptive capacity and flexibility means that new concepts are being constantly integrated and created. Special, but not unique, reservoirs of nuance and fine-grained differentiation also make the English language a perilous one when deployed to manage foreign affairs. Communication can be fraught with missteps and the poor alignment of intention with meaning. As the language of international commerce, politics, and diplomacy, English carries extra burdens, and we expect it to serve many different purposes.

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The roles of English as the language of international affairs can be imagined in a number of ways. First, it can be explained as a mode of coordination. This implies that English assists people of all sorts to effectively work together, to understand their different goals, and to seek some mutual recognition of their perspectives. This gives English a special status among languages, increasing its prestige when coordination can only be managed through the common tongue. Second, English provides a mode of socialization, through which different ideas can be made acceptable and understandable. This process requires constant attention to the norms, bounds, and expectations of those who have made English a thriving, growing medium of social exchange. To speak English is to accept certain ideas about personhood, society, power, and change, among a great many other inherited notions (as described in Wierzbicka 2014: 62–64, 173). Third, English serves to secure a mode of domination, where other languages are shunted aside. This leads to resentments; certainly French speakers have sought to resist the encroachment of English to the extent possible. Similar defensive efforts in languages like Thai prove relatively unsuccessful, and English loanwords now pepper languages from Korean to Xhosa. English might sound and look sophisticated, and global, and that has given it a dominant standing that no other language has come to rival.

Indeed, alternatives to English as the language of international relations, like Russian, Mandarin Chinese, or Esperanto, have tended to struggle with respect to some combination of coordination, socialization, or domination. As mediums for domestic or regional communication, they have often managed to find significant space but at the global level have yielded to the continued ascendency of English. English, in this sense, has demonstrated both "sticky power" (Mead 2004), the ability to perpetuate power after its material bases decline, and "network power" (Katzenstein and Shiraishi 1997), the ability to channel behaviour, norms, and thought around coordination points (see Pennycook 2013). The stickiness of English has been maintained by the use of technologies that have been created in English-speaking ecosystems. While machine translation and the recoding of computing to handle other languages are gradually shifting the weight away from English, it still has a central position. In the realms of finance, education, travel, and pop culture, English

also claims the high ground. Where it is challenged, as it has been by niche products such as K-pop, the novelty of the non-English form tends to only reinforce the overall pattern of English usage.

Moreover English has established a second layer of dominance in international affairs through its hegemony over the academic study and theorization of the discipline of international relations. The formal academic study of international relations began in the Anglophone world and has been almost completely defined by theories, debates, and paradigms developed by Anglophone scholars. While international relations as an academic discipline has spread rapidly to other non-English-speaking parts of the world, early Anglophone dominance is still discernable in the ways that international affairs are taught and researched. This remains the case even when, as in China, considerable effort has been put into finding locally grounded theories to explain international affairs.

In this chapter we argue that the role of English requires fresh consideration in international relations because of significant changes to the structure of the global system (a theme also touched on in Maley, Chap. 4, this volume). While foreign affairs are by definition intercultural, they have been shaped for decades by a unipolar configuration of power. The United States and its English-speaking allies have exerted considerable influence over the character of international affairs, with the institutions they created in the wake of the Second World War giving rise to the order that prevailed after the demise of the Soviet Union. What is now changing is that a multipolar international system is emerging that requires different understanding of intercultural communication. The new powers of Asia have wealth and the cultural self-confidence to challenge English as the dominant medium in globalized political life. This has led to new compromises on the linguistic front, with an array of different sorts of English language usage, the pluralized "Englishes", jockeying for attention.

We further suggest that in this era of multipolar intercultural relations, the English language has assumed a crucial role in mediating new forms of international order. As the world struggles to discover a new age of prosperity and globalized exchange, built around advances in education, technology, and science, the need for a language for coordination is now greater than ever. Yet these common goals exist in tension with a deepening

rivalry over which countries should have a say in defining the rules of global order—rules which, if defined in particular ways, can accrue benefits to some countries rather than others. For this reason, the first decades of our era of multipolar intercultural relations have witnessed growing competition among status quo powers such as the United States, the European Union, and Japan and rising powers, such as China, India, and Russia, over the rules of the international system. The temptation, particularly for the United States, is to use the "sticky power" of English as a way of forcing socialization of new powers into the rules of the existing order (which work very much to the benefit of the United States and its allies). Understandably, some rising powers have begun to see this as a form of domination and have begun to resist, through the enunciation of parallel languages of order. The danger, we argue, is that if English is used as a mode of competition rather than coordination, we could ultimately lose the great benefits the world has enjoyed from the construction of a global system of coexistence and exchange.

For this reason, Minimal English, as a form of "Basic Human" communication, needs to be considered alongside the ways English is used by both practitioners and scholars of international affairs (for inspiration, see Goddard and Wierzbicka 2014). While some enjoy the aptitude of native speakers, especially those who benefit from the cosmopolitan educations of the world's English-speaking hubs, there are many others whose grasp of English hovers in a functional or working state. Their limited grasp of all the subtleties of English is compensated by an appreciation for the parallel versions of English that have become so important in the wider world of international exchange. With smaller vocabularies, ambiguous words trimmed for imprecise meanings, and a standard—widely understood—selection of nouns, adjectives, verbs, and all the rest, it is possible to transact most international business in one of these standardized dialects, calibrated to make communication possible across vast cultural distances. The application of our ideas about parallel English helps to explain how variations on the Minimal English concept have emerged within different foreign policy communities. These parallel language communities, whether pragmatic or programmatic, could prove a threat to genuinely global systems of exchange and mutual enrichment. It is to warn against this

prospect that Minimal English can play such a crucial, coordinating role in this new era of multipolar intercultural relations.

5.2 Rise of English and Its Parallels

Over recent centuries the use of English has become synonymous with globalization, technology, and a specific portfolio of development priorities. Notions of liberal politics, free trade, cultural inclusion, and economic opportunity have been widely associated with the language, especially since the United States seized the mantle as the world's only great power. The end of the Cold War relegated a linguistic, as well as political and cultural rival, to lesser status. While it is still possible to meet Vietnamese or German technicians trained in the Soviet Union during the heyday of Russian ambitions, new generations of educated elites are almost inevitably conversant in English, or at least in one of its many variants. That English facilitates global finance, travel, and diplomacy makes it an obvious choice for almost anybody's second language. This consolidates the prestige of English as a medium of exchange, while also serving to encourage counter-attacks on its homogenizing force.

Many have identified the problem of English usage as a matter of cultural conglomeration, homogenization, and even "Anglocentricity". There is the tendency of English-speaking powers to judge others by their own cultural standards; this is problematic for both those it is practised against and those who practise it. The fundamental problem, as such, is that an Anglocentric worldview distorts, and then often overestimates, the level of compliance that others will demonstrate. Many who accept English language domination do so grudgingly, and also with their own tools of linguistic resistance to deploy. It is the polyglot realities of international interaction that undermine the confidence of those who imagine that mastery of English can lead to a mastery of global affairs.

To explain why a different attitude is needed let us consider the parallel rise of other versions of English—from Indian, Southeast Asia, and beyond—that suggest the limits of the globalized English that is perceived to carry the most international weight (see also various chapters in Bolton and Kachru eds. 2004). Indeed within the Association of Southeast Asian

Nations (ASEAN), English has become the primary method of communication. A different language, perhaps a variety of *Bahasa* as spoken in Indonesia, Malaysia, Brunei, and parts of the Philippines and Thailand, could have become the preeminent method for intercultural communication. Instead English, with its prestige and perceived neutrality, has been the primary mode of transnational communication in this region of more than 600 million people. The hundreds of ASEAN meetings hosted each year are almost always conducted only in English. Formal usage of the ASEAN dialect has become a habit of generations, and it is usually only in less formal multilateral settings that other languages are heard.

A similar process has fused English to the self-image of India's elite, including those who conduct the country's foreign policy. While almost all Indians speak another mother tongue—whether Assamese, Tamil, or Hindi—they gravitate to English for certain kinds of academic, diplomatic, and commercial exchanges. And yet the flavour of English spoken by such people is different to what would be heard elsewhere in Asia, or among the many native speaker populations spread to the far corners of the globe. The high status of English emerged during the British colonial period, and its echoes have meant that the grammar, logic, vocabulary, and conceptualization of English are well understood. Or at least we assume that this should be the case. Where this matters for international relations, in both practical and academic senses, is that English has come to carry so much complexity and simplicity, all at the same time.

We cannot assume that such grammar and logic are therefore necessarily part of the parallel versions of English that have proliferated. Some carry simplifications that render ordinary English stupefied by novel usage and the enduring perils of incommensurability. Anglocentric assumptions that because an interlocutor speaks English, he or she fully understands and accepts all of the normative baggage with which the language is imbued (and which the monolingual English speaker is often completely unaware of), can give rise to considerable overestimations of agreement in contexts such as ASEAN. Anglophone frustrations with ASEAN's seeming inactivity and unwillingness to live up to its own pronouncements can often flow from an overestimation of what ASEAN leaders actually mean when they make pronouncements in English. It is necessary for a deep understanding of how ASEAN works to realize how

non-native English speakers compromise their language in English usage so as to get meanings across in cluttered cross-cultural settings. Indeed, in a region of so many languages and cultures, the common usage of English can often act as a double-blind, occluding genuine differences in how different societies conceive of their security, prosperity, and national prerogatives. To illustrate these points we continue our discussion with the ASEAN region, where different notions of security, power, and culture rub together, sometimes uneasily.

5.3 "Parallel Englishes" in ASEAN

Across the ASEAN region hundreds of languages are spoken. The official, national languages are diverse enough: Indonesian, Malaysian, English, Chinese, Vietnamese, Thai, Tagalog, Myanmar, Lao, and Khmer. It is only in Singapore, Malaysia, and the Philippines that large numbers of people are fluent in English, while elsewhere in ASEAN the language is a highly valued acquisition. Overall, the number of people who speak English to some degree or another is significant, especially among those who need to deal internationally. Tens of millions of ASEAN citizens can hold their own in English. The challenge is that translating different ideas between the languages of Southeast Asia is not straightforward and often requires the medium of English. For instance, finding a Myanmar-Indonesian interpreter in Jakarta is not simple: it makes sense that English will serve as a bridge between such different languages and cultures. Yet how is such understanding developed? How does English function as a medium of cultural exchange, even within the one regional grouping?

We suggest that in a region like ASEAN, there are three levels of English competency that rub together to produce the region's international relations. Among the region's English-fluent communities—in Singapore, Malaysia, and the Philippines, as well as among the small Anglophone-educated elites of the other original ASEAN states—there is what might be called "rich interaction". These fluent speakers are able to "think" in English and have, as part of their education and political socialization, processed the normative and political baggage of English in conscious ways. Singaporeans and Malaysians, for instance, are able to

argue about democracy, free speech, and human rights in full cognisance of the Anglocentric meanings, even if they are vigorously defending their own society's differences from Anglophone societies in relation to these values.

Second, there are those who function well in English, and who can conduct substantial international communication through the language, but who, in using the language, constantly perform the act of "internal translation". By internal translation we mean the process of translating English into their own language in order to process and react to it, and retranslating what they have processed into English to communicate their reaction. In the process of internal translation, normative, cultural, and political implications often do not make the transition. This can occur either unintentionally, when the full range of normative underpinnings are not completely grasped, or intentionally, when this normative baggage is fully understood but "bracketed" in order to make it more easily translatable into another language (and political culture).

Third, there are those who may have some capacity to understand some English but insufficient command and confidence to use it themselves for international relations. Mainly residing in the political elites of the "new" ASEAN members (Vietnam, Cambodia, Laos, and Myanmar), these statesmen rely heavily on "external translation", the rendering of conversations, communications, and agreements between their own language and English by bilingual officials. In external translation, the "bracketing" of normative and political baggage can happen to an even greater extent, often determined by the interpreter's inferior power relationship to those she/he is translating for, and the often understandable impulse to cleanse the language she/he is translating of its confronting aspects.

The result of this coexistence of different levels of fluency and translation in Southeast Asia is a region characterized by a particular form of international relations. At an ASEAN level, these varying levels of linguistic comprehensibility through the officially mandated English language have contributed to a deeply cautious and often seemingly hypocritical organization. An original norm of the organization has been that of consensus: an inability to move forward collectively unless all members specifically agree to any given proposal. While the cause of deep

frustration to both external and internal observers, this could be as much a pragmatic acknowledgement of the lack of normative and political agreement that underlies everyday communication in English, as it is an acknowledgement of the enduring differences among regime types in the organization. But at an ASEAN level, those accustomed to "rich interaction" in English have begun to demand more concerted collective action towards a range of normative political goals—human rights, rule of law, democracy, free trade, and investment—that sit very easily with the English language. The result has been a series of regional agreements on these values that remain only partially implemented, perhaps a testament to fluent English speakers' overestimation of the level of acceptance of the normative baggage of these agreements by non-fluent English speakers.

Another form of uneasy coexistence occurs at bilateral and subnational levels. Bilaterally ASEAN continues to be a region of considerable tension and rivalry. Territorial disputes, while remaining "shelved" at an official level, have the capacity to undermine bilateral relations and even to break into open conflict. The hostilities between Thailand and Cambodia over the territory around the Preah Vihear (Phra Wiharn) temple in recent years centre on conflicting interpretations of a 1962 International Court of Justice adjudication of the dispute (in English, of course). In this case, diverging interpretations and reinterpretations have become a major obstacle to finding any solution to the underlying dispute. Subnationally, in the many ASEAN states with internal conflicts, divergent understandings of English-derived security concepts can feed ongoing hostilities. In Myanmar, for instance, different understandings of the English language concept of "ceasefire" between the Naypyitaw government and different ethnic militias have only served to undermine trust and build mutual perceptions of bad faith within that country.

ASEAN is a region that demonstrates clearly the drawbacks and dangers of a world of only partially commensurable "parallel Englishes". The ASEAN experience shows how much collective coordination is hampered when fluent Anglophone speakers simply assume that counterparts dependent on either internal or external translation fully accept the normative political implications of the commitments they are making. Between and within Southeast Asian countries, there is considerable evidence that unintended or wilful misinterpretation can be a significant

driver of conflict and insecurity. ASEAN appears to be a region ripe for the widespread use of Minimal English.

5.4 "Socializing" Responsible Stakeholders

In this new multipolar intercultural world, however, the English language has begun to play a more prominent role as more than just a medium of communication and miscommunication. Faced with the challenge from rising non-Western powers to the authority and legitimacy of existing rules and institutions of global order—institutions and rules which were negotiated at a time when many of today's rising powers were either colonized or internally at war—the impulse of status quo powers is to bring about rising powers' compliance with existing rules and institutions. The keyword used to refer to this enterprise is "socialization", a term coined in the Anglophone world at the end of the Cold War to describe the new post-containment strategy of the United States and its allies towards their erstwhile opponents in the Soviet bloc. The central task in bringing about a "new world order"—a global community of liberal market democracies—was to socialize former communist bloc countries to the rules and institutions that had helped win the Cold War for the West. In a time of momentous summitry and fevered scholarship into "constructivist" understandings of international relations, few stopped to think about the normative baggage and power asymmetries conveyed by the word "socialization".

Of course, communist countries in Asia, such as China and Vietnam, did not share the fate of the countries of the Soviet bloc. But both countries' economic liberalization imperatives and China's concern to emerge from diplomatic isolation after the Tiananmen massacre seemed to make them ripe for socialization in the Asia-Pacific region. Anglophone policy elites in ASEAN, Australia, and the United States began to advocate the need to include a rising China in regional institutions such as APEC and the ASEAN Regional Forum as a way of socializing it to the existing rules and norms of the region. As China joined and became increasingly active in regional institutions, a feeling of self-satisfaction spread across the region. It seemed the former exporter of

people's revolution had come to realize all of the benefits that accrued from complying with existing rules and institutions, and was rapidly becoming "socialized" to the rules of the road.

It was in this context that in September 2005, US Undersecretary of State Robert Zoellick, the George W. Bush administration's self-proclaimed "China hand", gave a much-lauded speech to the National Committee on US-China Relations in New York City. Titled "Whither China: From Membership to Responsibility?", the speech began by observing how much China had benefited from the "open, rules-based" order it had opened up to during its reforms but then began to list a range of gripes about China's behaviour in that system, from intellectual property theft, to trade-deficit producing market manipulation, to playing an inadequate role in containing nuclear proliferation. China had to go further than just benefiting from and manipulating the open, rules-based order, argued Zoellick: "We need to urge China to become a responsible stakeholder in [the international] system. China has a responsibility to strengthen the international system that has enabled its success" (Zoellick 2005). In language that seemed the acme of reasonableness (see Wierzbicka 2006), Zoellick explained what he meant by "responsible stakeholder":

> All nations conduct diplomacy to promote their national interests. Responsible stakeholders go further. They recognize that the international system sustains their peaceful prosperity, so they work to sustain that system. In its foreign policy, China has many opportunities to be a responsible stakeholder. (Zoellick 2005)

> We need to encourage China to become a responsible stakeholder in the international system. As a responsible stakeholder, China would be more than just a member—it would work to sustain the international system that has enabled its success. (Zoellick 2005)

Zoellick's phrase was assiduously picked up and used by American officials and their counterparts among their Anglophone allies. So reasonable seemed Zoellick's proposition—China had benefited from the system and therefore had a reciprocal duty to uphold that system—that Anglocentric officials seemed utterly oblivious to the phrase's cultural and

power connotations. Like so many other specifically English terms, "stakeholder" has its intellectual origins in the British enlightenment, particularly in the commercial revolution that underpinned the formation of joint-stock companies. The original usage refers to the process of contributing capital to a collective enterprise and consequently receiving a portion of the benefits of the enterprise proportional to the original investment. Later usage refers to persons affected by an enterprise, whether or not they have contributed capital to finance it. In both usages—the original commercial and later industrial relations variants—there is ambiguity about whether stakeholding carries with it a right to codirect the enterprise, or whether one is merely a "principal" with no direct control but whose interests must be considered by controlling "agents". Indeed, particularly in the latter, industrial relations usage, there is much politicized debate over whether "stakeholder" status should imply direct input into decision making.

"Responsible" is also a term laden with cultural and power connotations. Like the word "socialize", "responsible" implies an unequal relationship. The person being "socialized" and urged to be more "responsible" is by definition someone less mature or advanced, less aware of prevailing conventions, and prone to disruptive or inappropriate behaviours. The agent of socialization on the other hand automatically assumes a tolerant, helping, and, if necessary, disciplining attitude. There is no question about who, between socializer and socialized, must do all of the self-changing work and who is to be the judge of whether the change in behaviour and attitude is sufficient or wanting.

To a self-proclaimed "China hand" like Zoellick, the jarring irony of inviting China to become a responsible stakeholder should have been blindingly obvious. Since the beginning of recorded history, Chinese society's defining characteristic has been its sense of civilizational superiority over the "barbarian" tribes and kingdoms surrounding it. The imperial Chinese world order was structured according to which surrounding peoples had acculturated themselves to Chinese civilizational values: those that had were accorded status as tributary kingdoms and those that had not were regarded as barbarians. Power and centrality in the Sino-centric order derived from being able to require that other societies "socialized" to

Chinese values or be cast into isolation. It was an intuition reinforced by more recent experience. Few among China's policy elites had forgotten the way in which the United States and its allies had used their command of global institutions to keep the People's Republic out of the United Nations until the early 1970s, or indeed the way that the United States and the EU had bargained hard to gain concessions from China as conditions for admitting it to the World Trade Organization in 2000.

Unsurprisingly then, Zoellick's call for China to become a responsible stakeholder —as reasonable as it sounded to Anglocentric ears—had precisely the opposite effect on Chinese behaviour. Zoellick had begun his responsible stakeholder speech by making reference to a *Foreign Affairs* article written by a leading Chinese policy intellectual, Zheng Bijian. Zheng's article had championed the idea of a "peaceful rise" for China and had been quickly adopted by official Chinese circles as a strategy for reassuring the United States and China's neighbours of the essentially benign nature of China's growing power and wealth. But around the time of Zoellick's speech, Chinese leaders and official publications began to back away from the "peaceful rise" formulation as assiduously as they had adopted it. According to one study, the incidence of the phrase "peaceful rise" dropped from being used 191 times in official documents and journals in 2004 to being used just 59 times in 2006 (Glaser and Madeiros 2007: 300). The ostensible reason for the sudden fall from favour of Zheng's formulation was the furious debate it had touched off in Chinese policy circles. Prominent among the objections to "peaceful rise" were arguments that it removed from China the option of punishing Taiwan for flirting with independence, that it would embolden the United States and its allies to try to "contain" China, and that the policy constrained China from becoming a "normal" great power (Glaser and Madeiros 2007).

In the years that followed, a growing assertiveness in Beijing's foreign policy actions accompanied its shift in rhetoric. Rather than becoming a responsible stakeholder in the US-led system, China became a prominent critic of current institutions, a sponsor of alternative institutions, and a blocker of action on global issues such as climate change. After almost a decade of conciliatory behaviour, a new

assertiveness developed in China's territorial claims in the South China Sea and the East China Sea, and tensions have risen again in relation to its disputed land borders with India.

While it is unlikely that Zoellick's responsible stakeholder call caused the abandonment of the peaceful rise formulation and the accompanying assertiveness in Chinese foreign policy, it is likely that such a high-profile speech gave added impetus to the critics of peaceful rise and further undermined its proponents. Yet it is worth asking whether, if it had been couched in more appropriate language, a policy of welcoming China to take a role in global rule making and institutional direction commensurate with its size in international affairs might have produced different results.

It is here that Minimal English could make a long-lasting contribution in international relations. With our thanks to Anna Wierzbicka, Cliff Goddard, and Ye Zhengdao, the following key international relations concepts might be rendered into Minimal English in the following ways:

"International system"

[People can think like this:]

Many countries on Earth are parts of one big something. If some of these countries do some things, this can be very good for all these countries. If some of these countries don't do some things, this can be very bad for all these countries.

"Big countries"

[People can think like this:]

Some countries are not like many other countries because they are very big countries. America is one of these countries. China is one of these countries.

A country like this can do many things not like many other countries. If a country like this does some things, this can be very good for many other countries. If a country like this doesn't do some things, this can be very bad for many other countries.

"All countries conduct diplomacy to promote their national interest"

[People can think like this:]

Everyone knows that when one country speaks to other countries, this country often thinks like this:

"I want good things to happen to me, I don't want bad things to happen to me". It can't be not like this.

Big countries need to "go further"

[People can think like this:]

When a big country speaks to other countries, it often thinks like all other countries think when they speak to other countries.

At the same time, it is good if a big country thinks like this at many times:

> "I am part of something, many other countries are parts of this something. I am a big part of this something.
>
> Because of this, if I do some things, this can be very bad for all these countries. Because of this I don't want to do these things."

(It is bad if a big country doesn't think like this at many times when it speaks to other countries.)

China

[People can think like this:]

Many good things are happening in China now. These good things are happening now because for some years China has done some things not like before.

At the same time these good things are happening now because it is like this:

> China is part of something. Many other countries are parts of the same something. These other countries have done many things for some time. These other countries haven't done some other things during this time. Because of this, some good things are happening now to many countries. It is good if all countries think about this at many times.

(It is good if China thinks about this at many times.)

Of course, it is not just the recasting of communication between the United States and its English-speaking allies and China that will bring about a change in what is arguably the biggest challenge in international affairs. The use of Minimal English must of course accompany a genuine abandonment of attempts to authoritatively socialize (with all of the power and cultural connotations that implies) China into the existing international system. Take even the semantic connotations of "cooperation" that "modern Anglo culture" takes for granted (Wierzbicka 2014: 104). The use of Minimal English implies an effort to genuinely find a neutral ground of coordination with Beijing and must be matched by a genuine undertaking to meet China halfway in finding space and voice for it in the rules and institutions of international order.

5.5 Minimal English for International Relations

Minimal English therefore offers a chance to move from a mode of domination and socialization to a mode of coordination and renegotiation, especially where maximum semantic value can be conveyed with the simplest versions of words. It also urges us to recognize that using English in ways that do not acknowledge heavy cultural and power baggage can invite misunderstanding and resistance, even when dominating socialization may not have been the intent. That alternative versions of Minimal Arabic, Minimal Mandarin, and Minimal Spanish (and other Minimal languages) can be similarly useful in making such a project a plausible way of cutting down on miscommunication. The translation between languages on a "simple" basis recognizes that, in practice, this is often what occurs. The fact that so few people have perfectly "ambidextrous" command of multiple languages means that strengths and weaknesses need to be managed on a continuous basis, even among professionals. Complex ideas and concepts can be cut down, and then rebuilt, depending on the flair of the translator and the capacity for understanding of the audience.

That this process is so common makes the use of Minimal English much less controversial than some might imagine, because it is part and parcel of the simplification process that already occurs. Giving it a name, as Minimal Language, could help people to better appreciate its value in the conduct of sensitive international politics. Where smaller vocabularies, and their limited emotional and conceptual ranges, bump against each other, it makes sense that Minimal Language will prevail. This is not to imply that such language is devoid of significance: some of the most important international relations are conducted with very careful attention to ensuring that the key message is simply communicated. Choices of words matter greatly, as do sentence structures, tenses, and the other apparatus of careful and precise communication. Keeping it accurate, without being confusing, is the perpetual challenge, and one that Minimal English can help to manage.

A well-drilled diplomat, interpreter, or translator can immediately grasp the need for simplification, but there may be advantages to formalizing the role Minimal English or other Minimal Languages might play, including in university curriculums. Much effort in the teaching of international relations as an academic discipline is put into helping students to master complex and often idiosyncratic, conceptual, and technical language. Yet students will greatly benefit from a more structured approach to communicating those ideas in ways that will convey the most meaning to different types of audiences (as explained in the colourful anecdotes in Maley, Chap. 4, this volume). Whatever dominance is retained by English as the primary language of international affairs, it still needs to adequately convey information in a polyglot world. International relations, when conducted effectively, increase understanding across cultural boundaries and improve opportunities for people to get along. History is littered with examples of how this goes wrong, with wars and other calamities often the outcome. Yet today there are many instances where international communication occurs on a regular basis and sees conflicts and contention well managed by different states, leaders, and diplomats.

English plays a significant role in the ongoing effort to convey meaning across cultural boundaries and to give different kinds of people a chance to appreciate their different perspectives. In this chapter we have sought to link the development of Minimal English to the concerns of practitioners and analysts of international affairs. It is in the enmeshment of parallel versions of English that this discussion has shifted our attention to the ways that simplification and codification can assist in the conduct of foreign relations. Success does not always require elegance, but it is built on the need to get words to carry their meanings across cultural boundaries. The use of English within ASEAN provides a good example of how this works in practice, where many people who speak English as a second, third, or fourth language can effectively communicate on a long-term basis. The possible use of Minimal English, or Minimal Chinese, in relations between the United States and China offers one further possibility for finding what is “basic” and “human” in an increasingly fractious and rivalrous relationship.

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6

Charter of Global Ethic in Minimal English

Anna Wierzbicka

6.1 The Need for a Charter of Global Ethics

It is fitting, I think, to start a chapter on Global English and global ethics with a quote from the "Earth Charter" published by the UNESCO in 2000 and formally endorsed by thousands of organizations around the world:

> We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of culture and life forms we are one human family and one Earth community with a common destiny. (UNESCO 2000: 1)

As the introduction to "The Earth Charter" further points out, in order to be credible, an Earth Charter must have an ethical dimension. Thus, its concluding paragraph states: "We urgently need a shared vision

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of basic values to provide an ethical foundation for the emerging world community" (p. 1). It is not surprising, therefore, that when the Earth Charter was being developed in the last decade of the twentieth century, it was being developed in parallel with a declaration on global ethic.

In fact, there have been a number of remarkable documents in that period (for discussion, see Sect. 6.4), apparently inspired by the Dalai Lama, which aim at formulating a global ethic. In the Dalai Lama's own writings we see a great concern for what he calls "basic ethical principles" and "basic human values" (1999: 27, 185). As he puts it in his *Ethics for the New Millennium*:

> In the past, the respect people had for religion meant that ethical practice was maintained through a majority following one religion or another. But this is no longer the case. We must therefore find some other way of establishing basic ethical principles. (Dalai Lama 1999: x)

The key question for the Dalai Lama is "How [...] are we to teach morality to our children?" (Dalai Lama 1999: 185). But while education of children is obviously of paramount importance, a charter articulating basic human values and basic ethical guidelines is clearly needed at all levels. As the "Declaration Toward a Global Ethic" put forward by the Parliament of the World's Religions put it (Early Version Declaration 1992: 3), "humanity needs not only political programs and action [...], it needs hopes, goals, ideals, standards".

According to this and subsequent versions of the declaration, a basis for a global ethic can be found in the common core of the religious teachings of the world. In the words of the 1993 version, "there is already a consensus among the religions which can be the basis for the global ethic – a minimal fundamental consensus concerning binding values, irrevocable standards, and fundamental principles" (1993: 4). This minimal consensus can "supply the moral foundation for a better individual and global order".

As the "Declaration Toward a Global Ethic" further points out, many religious traditions agree on certain fundamental ethical norms. The Declaration also points out that the role of a Charter of Global Ethic is different from, and complementary to, political and legal declarations:

> We are conscious that religions cannot solve the economic, political and social problems of this earth. However, they can indeed provide what obviously cannot be attained by economic plans, political programs or legal regulations alone: They can effect a change in the inner orientation, the new orientation for life.

Recalling the 1948 Universal Declaration of Human Rights of the United Nations, the Declaration on Global Ethic (Final Version 1993: 6) points out that "what it formally proclaimed on the level of rights we wish to confirm and deepen here from the perspective of ethics. The full realization of the intrinsic dignity of the human person, of inalienable freedom, of the equality in principle of all humans, and the necessary solidarity of all humans with each other".

6.2 A Charter of Global Ethic Must Be Cross-Translatable

In talking about a program of global ethics one may distinguish, at least at the outset, two aspects: the content and the language in which this content is to be articulated. As far as the content of global ethics is concerned, it would be hard to disagree with the Dalai Lama that "it is doubtful whether we could do better than turn to the basic ethical directives articulated not only by (...) the world's great religions but also by (...) the humanist philosophical tradition" (2010). As far as the *language* of global ethics is concerned, however, perhaps we *could* do better—because we can now draw on what is known at present about the shared *conceptual* core underlying and embedded in all the different languages of the world and different religious, cultural, and philosophical traditions.

Indeed, from this point of view, the most remarkable statement appears in an early version of the Declaration which would be eventually endorsed by the Parliament of the World's Religions in 1993. It is Principle 6: "This must be a Declaration which is formulated in language which is GENERALLY UNDERSTANDABLE [in capital letters], which avoids technical arguments and jargon, and likewise is translatable into other languages" (Early Version Declaration 1992: 1).

The awareness of the paramount importance of cross-translatability in ethical dialogue in the world visible in the Declaration can be linked, it seems, with the Dalai Lama's influence, and traced back to his transcultural experience as a Tibetan Buddhist monk living in exile in India and trying to communicate with the world at large. As he writes in his book *Ethics for the New Millennium* (1999):

> My aim has been to appeal for an approach to ethics based on universal rather than religious principles. (...) In this context, one particular problem arose from the fact that it is difficult to render into modern language a number of Tibetan terms it seemed essential to use. (...) I have tried to explain these in such a way that they could be understood readily by a non-specialist readership and *also rendered clearly into other languages*. (Dalai Lama 1999: XI, emphasis added)

The Tibetan terms which the Dalai Lama singles out as particularly important to his own ethical thinking and as having universal relevance include:

nying je (glossed as 'compassion' and 'empathy' e.g. 1999: 126)
nying je chenmo (glossed as 'great compassion', e.g. 1999: 128)
sö pa (glossed as 'patience', 1999: 101–2)
kun long (glossed as 'motivation' in 1999: 31, and as 'state of mind', in 1999: 89)
nyong mong (glossed as 'afflictive emotion', e.g. 1999: 89)

For European and Anglophone scholars it is perhaps harder to recognize that their basic ethical terms do not translate into other languages. For example, it is not often recognized that phrases such as "inalienable freedom" or "intrinsic dignity of the human person" are not translatable across languages and that not even single words like "dignity", "freedom", and "equality" have their counterparts in all, or most, languages of the world. The aspiration to produce a declaration of a global ethic which *would* be translatable is truly remarkable, but without any input from cross-linguistic semantics, those who formulated the final declaration could not have had a clear idea of which words could safely be used to

create a document translatable into other languages (as well as understandable to a non-specialist readership).

The authors of successive versions of the Declaration Toward a Global Ethic clearly, and very laudably, made an effort to avoid technical English, and even "Big English" in general. Accordingly, a lot of weight is placed in these documents on the adjectives *humane* and *inhumane*, the adverbs *humanely* and *inhumanely*, and the noun *inhumanity*. Thus, "The Principles of Global Ethic" set out in the Declaration prominently include "A fundamental demand" that "every human being must be treated humanely" (1993: 7), amplified in statements such as this: "In the face of all inhumanity our religious and ethical convictions demand that *every human being must be treated humanely*!".

But the words *humane* and *inhumane* don't translate into many other languages. They don't even translate well into Russian, where the loan word *gumannyj* ("humane") reeks of Soviet propaganda, whereas the *bona fide* Russian word *besčelovečnyj* ("inhuman") expresses moral outrage and (unlike the English word *inhumane*) cannot be used in an emotionally neutral context. *Inhumane* is a term of negative moral judgement but it is not a word of horror and can be used as it were "objectively"; but *besčelovečnyj* cannot be used in this way. Thus, while words like *humane* and *inhumane* can be readily explicated in Minimal English, they do not belong to cross-translatable Minimal English themselves.

The *Collins Cobuild Dictionary of the English Language* (1987) glosses the English adjective *humane* as "considerate" and "gentle" and offers the following two definitions:

> **humane 1** A person or group that is **humane** behaves with kindness, thoughtfulness, and sympathy towards other people. e.g. *Many of us are working for a more humane and civilized society.* **2** A **humane** action is one in which you cause as little pain or suffering as possible. e.g. *...the humane treatment of psychiatric patients, animal must be killed humanely*

For many purposes, these definitions may be fine, but they rely on other English words which are no more translatable into other languages than *humane* itself. Using Minimal English, we can spell out the core meaning of this word along the following lines:

humane:
It can be like this:
Someone can do some things to some other people. These other people can't do the same.
When this someone does these things to these other people, this someone thinks like this:
"If I do this in one way, these people can feel something very bad because of this. I don't want this. Because of this, I want to do it in another way"
It is good if people think like this about other people. It is good if people think like this about living creatures of many kinds.

To devise a credible Charter of Global Ethic, therefore, we need to leave behind "Big English" words such as *humane* and *inhumane*, *violence* and *non-violence*, *tolerance* and *respect*, *fairness* and *equality*, and so on. We also need to forget "Big English" words like *exploitation* and *discrimination*, *degradation* and *domination* (cf. Stollznow 2007). In fact, as I will try to show in my own proposed "Charter of Global Ethic", all we need is the set of 65 universal semantic primes and a handful of semantically complex but universally available words such as "men", "women", "children", "kill" and "the Earth".

So I am now turning to my own proposed version of the Charter of Global Ethics. I have divided this text into two parts: first, guidelines introduced in the frame "it is very bad if…" and, then, those introduced in the frame "it is good if…". The first part will be divided in turn into two clusters, one focussed on what people want to do and, the other, on how people think about other people. I will number all the norms, both negative and positive ones, consecutively, and will label the clusters by capital letters. The first cluster in the first part is labelled [A], and the four norms included in it, 1, 2, 3, and 4.

6.3 Charter of Global Ethic in Minimal English

6.3.1 Negatively Framed Norms: "IT IS VERY BAD IF…"

I will start this section by listing the four major norms relating to "very bad things" that people may want to do. They are:

[A] IT IS VERY BAD IF PEOPLE WANT…

[1] It is very bad if people want to do very bad things to other people.
[2] It is very bad if people want to kill other people.
[3] It is very bad if men want to do very bad things to women.
[4] It is very bad if people want to say many things to other people if they know that these things are not true.

For purely mnemonic purposes, one could link these four norms with words like "hatred", "murder", "rape" and "bashing", and "lies", but this is not exactly what is intended. What *is* intended can only be captured in simple and universally cross-translatable words of Minimal English, as shown in the four statements above (1–4).

Of the four norms presented above, the last one may be more controversial than the other three: surely, lying is not as bad as hatred, murder, or rape? The matter is open to debate, but it needs to be borne in mind that norm 4 above is not about fibs, "white lies", or colourful exaggerations, and not even about single cases of lying of any kind. It is about people, times, and places steeped in lies, such as Nazi Germany (with Goebbels' propaganda), Mao's China, Eastern Europe under the communist regimes between 1945 and 1989, or currently Putin's Russia.

I have formulated these four norms in terms of what people *want to do* rather than what people *do* because it seems to me that this is a key difference between a legal perspective (in a broad sense) and a perspective of values and ideals: the goal of laws and conventions may be that people will not *do* very bad things to other people, but the ethical ideal is that people will not *want* to do very bad things to other people. As the 1992 version of the Declaration Toward a Global Ethic puts it, in a section titled "A Transformation of Consciousness", it is a matter of people's "inner orientation":

> All historical experience demonstrates the following: Our earth cannot be changed unless in the not too distant future an alteration in the consciousness of individuals is achieved. This has already been seen in areas such as war and peace or economy and ecology. And it is precisely for this alteration in inner orientation, in the entire mentality, in the "heart", that the religions bear responsibility in a special way. (Early Version Declaration 1992: 7)

As this section (together with its title) illustrates, the "inner orientation" referred to in the Declaration Toward a Global Ethic has to do with both "the heart" and "the mind", that is, in my terms, with "wanting", "feeling", and "thinking". Thus, while I have formulated the first four norms in terms of "wanting", the following two are formulated in terms of "thinking" (with norms of "feeling" following after that):

[B] IT IS VERY BAD IF PEOPLE THINK LIKE THIS…

[5] It is very bad if people think like this about some people:
"People of this kind are not like other people, they are below other people."

[6] It is very bad if people think like this about people:
"I am someone of one kind. People of this kind are not like other people. They are above other people."

[7] It is very bad if men think like this about women:
"There are two kinds of people. Men are one kind; they are above the other kind. Women are the other kind."

[8] It is very bad if people think like this about people:
"People of many kinds live on Earth. People of some of these kinds are bad people."

[9] It is very bad if people often think like this about many things:
"This is not mine; it is someone else's. I want it to be mine."

For mnemonic purposes these six norms can be linked with words such as "Untermensch", "Übermensch", "sexism", "racism", "superbia", and "greed", but again, these words are no more than hints. What is really intended can only be stated in cross-translatable Minimal English (or Minimal anything else), not in words taken from "Big German", "Big Latin", or "Big English".

6.3.2 Positively Framed Norms: IT IS GOOD IF…

Moving now to the second, "positive", part of the Charter, let me start by commenting on the asymmetry between the two frames: "It is very bad if…" and "It is good if…". The idea behind this asymmetry is that a

Charter of Global Ethic needs to state, first of all, a strong repudiation of evils such as hatred, murder, rape, and ingrained lying. As for positive ideals, it seems to make more sense to formulate more modest goals, achievable for many ("it is good if…") rather than the highest ideals perhaps less widely attainable ("it is very good if…").

"Good Will": IT IS GOOD IF PEOPLE WANT…

I begin the second part of the Charter with two very general ideals which can bring to mind English words such as *love*, *kindness*, and *benevolence*, but which by no means match these words and which, once again, can only be captured in Minimal English:

[C] IT IS GOOD IF PEOPLE WANT…

[10] It is good if people want to do good things for other people.
[11] It is good if people want good things to happen to other people.

While section [C] is focussed on what people *want*, section [D] is devoted to what people *don't want*. Broadly speaking, the two norms of rejection presented in cluster [D] mirror those of "wanting" in cluster [C]:

[D] IT IS GOOD IF PEOPLE DON'T WANT…

[12] It is good if people don't want to do bad things to other people.
[13] It is good if people don't want bad things to happen to other people.

In this case, however, a certain elaboration and perhaps specification seem to be desirable. When we say that "it is good if people want to do good things for other people", we mean a general attitude towards other people (especially those that one comes into contact with). In the case of aggression and hatred, however, the ethical effort needs to be directed, above all, at highly specific people: those who have greatly injured or harmed us. To use at first "Big English", the key English words here are *revenge* and *forgiveness*: if someone has done something very bad to us, it takes a special effort to rid one's heart of a desire for revenge and of very bad feelings towards the person who has done it. Thus, the two basic norms labelled here as 12 and 13 may need to be complemented by norms 14 and 15:

[14] It is good if people don't want to think like this about any other people:
"This someone did something very bad to me. Because of this, I want to do something very bad to this someone."
[15] It is good if people don't want to think like this about anybody for a long time:
"This someone did something very bad to me."

Good Ways to Feel

This brings us to cluster [E] of the proposed charter, which includes norms introduced in the frame "It is good if people feel...". The inclusion of such norms in the proposed Charter of Global Ethic may raise some eyebrows: can there be ethical norms based on feelings?

In many philosophical conceptions of ethics, feelings are indeed excluded from the picture. In particular, the rationalist ethics of "right" and "wrong" and Kantian ethics based on the concept of "duty" (more precisely, "Pflicht") did not leave much room for feelings as an important dimension of ethics (Wierzbicka 2015a). On the other hand, from a Buddhist perspective, concepts like "compassion" and "empathy" are fundamental. Comparable concepts are also central to the New Testament ethics as formulated in the Sermon on the Mount in St. Matthew's Gospel (for discussion, see Wierzbicka 2001). To quote from the Dalai Lama's *Ethics for the New Millennium* (1999: 76):

> ... our innate capacity for empathy is the source of that most precious of all human qualities, which in Tibetan we call *nying je*. Now while generally translated simply as "compassion," the term *nying je* has a wealth of meaning that is difficult to convey succinctly, though the ideas it contains are universally understood. It connotes love, affection, kindness, gentleness, generosity of spirit, and warm-heartedness.

Such a broadly understood concept of something comparable to "compassion" (*nying je*) is closely linked in the Dalai Lama's thinking with a concept known in Tibetan of *shen dug ngal wa la mi sö pa*, which translates as "the inability to bear the sight of another's suffering" (1999: 66).

The version of the Charter of Global Ethic I am proposing here includes three ethical norms based on feelings:

[E] IT IS GOOD IF PEOPLE FEEL…

[16] It is good if people feel something good towards other people.
[17] It is good if people don't want to feel something very bad towards other people.
[18] It is good if people feel something when they know that something very bad is happening to someone in the place where they are. It is good if they feel something good towards this someone because of this. It is good if they want to do something good for this someone because of this.

For mnemonic purposes, we can link these three norms with words like *love* (or *warmth*), *hate*, and *compassion*, but once again, such labels cannot identify with precision what is really intended, whereas explications in Minimal English can.

Good Ways to Think (Especially, About People)

Finally, the last section, section [F], is devoted to positive guidelines for how it is good for people to think about other people and, also, to desirable ways of thinking about animals and about the planet where we all live. Before we try to articulate these ideals in Minimal English, it may be helpful to bring to mind words and phrases from "Big English" such as *human solidarity* (including what Pope Francis, in his 2015 Encyclical *Laudato Si*, calls *intergenerational solidarity*), *human dignity*, the need for the strong to protect the weak, the need for adults to care for children, and the need for humans to protect the animals and to care for the Earth where we live.

In cross-translatable Minimal English these six norms can be set out as below. To comment only on the first of the six, I am following here the Dalai Lama's minimalist assumption that, to quote, "ultimately we are all brothers and sisters, that there is no substantial difference between us, that just as I do, all others share my desire to be happy and to avoid suffering" (1999: 78).

It is interesting to note that for all his desire to identify with all living beings, and to empathize with their suffering, the Dalai Lama makes a

special case for the need for people to identify with other *people*. Indeed, this identification of people with other people is the cornerstone of the global ethic that he envisages. There is kinship between humans and animals based on the fact that both groups "don't want to feel something very bad" (norm 23 below), but there is also "brotherhood" among humans, who—unlike animals—can take a long-term view and who want to avoid long-term "suffering" and yearn for long-term "happiness". As part of a global human charter on ethics, such a recognition of the fundamental unity of humankind seems appropriate.

[F] IT IS GOOD IF PEOPLE THINK LIKE THIS…

[19] It is good if people think like this about all other people:
"This someone doesn't want to feel something very bad for a long time. This someone wants to feel something good for a long time. This someone is someone like me."

[20] It is good if people think like this about all people:
"I know that there is something very good in this person, because I know that there is something very good in all people."

[21] It is good if people think like this about some other people:
"These people can't do very much. Very bad things can happen to them because of this. It is good if other people want to do many good things for these people."

[22] It is good if people think like this about children:
"Something very bad can happen to children if other people don't do many good things for them. Because of this, it is good if other people want to do many good things for them."

[23] It is good if people think like this about living creatures of many kinds:
"These creatures can feel something very bad, like people can feel something very bad. Because of this, I don't want to do some things to these creatures."

[24] It is good if people think like this about the Earth:
"Many people live on Earth now. Many other people will live on Earth after. Very bad things can happen to these other people if people do some things on Earth now. I don't want these bad things to happen to these other people. Because of this, I don't want to do some things."

6.4 Discussion: Language Issues in Comparative and Global Ethics and Interreligious Dialogue

The Charter of Global Ethic presented here uses a language very different from that of other documents which have been proposed in the last two or three decades in about the need for a "world ethics". In the following I would like to draw some further comparisons with some of these important works.

6.4.1 "The Dialogue Decalogue" (2000) and "In Search of Global Ethical Standards" (1996)

To begin, I will quote from two documents: "The Dialogue Decalogue" put forward by the Global Dialogue Institute, Philadelphia (2000), and the report "In Search of Global Ethical Standards" (Council of Former Presidents of State and Prime Ministers, Vancouver, 1996).

The "Dialogue Decalogue" opens with the following three "commandments". I quote after Race (2001: 171):

1. Be open within.
   Open our self to our dialogue partner so as to learn, that is, to change and grow in our perception and understanding of reality, and then act accordingly – a self-critical thinking, intrapersonal move.
2. Attend.
   Be fully present both to our self and our partner in a critical-thinking mode; respond to our partner rather than make our favourite speech.
3. Be open between.
   Make dialogue a two-sided project – within each community as well as between communities – a critical thinking, intercommunal move.

It would be hard to explain briefly just how untranslatable the words, phrases, and metaphors of these "commandments" are, and just how locked in English the thinking behind them is. Not only is the word

"dialogue" culture-specific (Wierzbicka 2006), but so are the key metaphors of "being open", "attending", and "having"—let alone "being open within", "being open between", and "moving inter-communally". To imagine that formulations of this kind could provide an effective basis for "a global dialogue" suggests a total lack of attention to the fact that ours is a "Multicultural Planet" (Laszlo 1993) and that its inhabitants speak and think in some 6000 different languages, most of them without words of the kind used in the proposed global Dialogue Decalogue.

Turning now to the report of the InterAction Council of Former Presidents of State and Prime Ministers, its most remarkable features are a clear declaration of the priority of ethics over politics and the law: "Ethics should precede politics and the law", and its acceptance of the Chicago Declaration Toward a Global Ethic (1993). When it comes to the substance of the minimal basic consensus required for global ethic, the Council adopted two brief basic principles, "humanness" and "the golden rule", expanded by "four irrevocable directives" (Küng 1998: 110–11), as follows:

- Every human being must be treated humanely!
- What you wish done to yourself, do to others.
- Commitment to a culture of non-violence and respect for all life: the age-old directive: You shall not kill! Or in positive terms: Have respect for life!
- Commitment to a *culture of solidarity and a just economic order:* the age-old directive: You shall no steal! Or in positive terms: Deal honestly and fairly!
- Commitment to a *culture of equal rights and partnership between men and women:* the age-old directive: You shall not lie! Or in positive terms: Speak and act truthfully!
- Commitment to a *culture of equal rights and partnership between men and women:* the age-old directive: You shall not commit sexual immorality! Or in positive terms: Respect and love one another!

Of these six principles, the second one (the Golden Rule) is the most translatable. As some philosophers' quibbles about sadomasochists (cf. Wattles 1996: 6) indicate, however, for full clarity and accessibility,

even this "rule" requires a more explicit formulations—I contend, along the lines proposed in my book *What Did Jesus Mean?* (Wierzbicka 2001: 194):

> You want other people to do good things for you.
> It will be good if you do good things for other people,
> like you want other people to do good things for you.

As for the "four irrevocable directives", they are all brimming with untranslatable English words and phrases, such as "commitment", "non-violence", "fairly", "tolerance", "sexual", and "partnership" and with phrases such as "act truthfully" and "commit sexual immorality". It is interesting to note that the only fragments of these four norms which are more or less clear and translatable are those described as "the age-old directives": "you shall not kill!", "you shall not steal", and "you shall not lie". They correspond, very roughly, to norms 2, 9, and 4 of the present Charter.

I would argue, however (in the spirit of the Dalai Lama), that the general frame "You shall not do this!" is less appropriate for global ethics than the frames used here, which are formulated in terms of evaluations ("it is (very) bad", "it is good"), thoughts, wants, and feelings ("… if people want", "…if people think", "…if people feel"). After all, as the 1992 version of the Declaration put it, what is called for, above all, is an alteration in people's consciousness, a "transformation of consciousness", or an alteration in inner orientation, in the entire mentality, in the "heart".

In the version included in Küng and Kuschel's (1993a, b), *The Declaration Toward a Global Ethic* ends with the following appeal (reproduced here in an abbreviated form):

> In conclusion, *we appeal to all the inhabitants of this planet*. […] Together we can move mountains! […] Therefore *we commit ourselves to a common global ethic*, *to better mutual understanding*, as well as to *socially-beneficial*, peace-fostering, and *Earth-friendly ways of life*. […] (emphasis added)

In the spirit of a search for better mutual understanding, let me try to translate some of the key points of this appeal into Minimal English, that is, into a form of words more understandable, more cross-translatable, and more conducive to genuine global dialogue:

We appeal to the inhabitants of this planet…
We want to say something to all people on earth…

We commit ourselves to a common global ethic.
We think like this:
It is good if we want to speak to other people about this:
– How is it good for people to live?
– How is it bad for people to live?
We want to speak about it to other people.

We commit ourselves to better mutual understanding.
If some people want to say some things about it to other people,
it is good if these other people think about it like this:
"I want to know well what those people want to say,
I want to know well how they think about it".

We commit ourselves to socially beneficial ways of life.
We know that it is like this: If we live in one way, good things can happen because of this to many other people. We want to live in this way.
We know that if we live in another way, good things will not happen because of this to many other people. We don't want to live in this other way.

We commit ourselves to peace-fostering ways of life.
We know that it is like this: If we live in one way, some people will want to do very bad things to other people. We don't want to live in this way.
We know that if we live in another way, this will not happen. We want to live in this other way.

We commit ourselves to earth-friendly ways of life.
We know that it is like this: If we live in one way, some bad things can happen to the earth because of this. We don't want to live in this way.
We know that if we live in another way, these bad things will not happen. We want to live in this other way.

6.4.2 Language, Comparative Religious Ethics, and Interreligious Dialogue

In their editorial introduction to the volume *Explorations in Global Ethics*, Sumner Twiss and Bruce Grelle (1998a) state that their overriding purpose is to bring together the discipline of comparative religious ethics with the community of interreligious dialogue. They see the search for a global ethics as having exposed certain weaknesses in both fields or pursuits:

> So we are confronted with a problematic and provocative situation. On the one hand, we have an area of scholarly inquiry—comparative religious ethics—which, despite its sophisticated tools and methods, appears to lack a unifying rationale and purpose convincing to those within and outside the field. On the other hand, we have a community of interreligious dialogue with an enormously persuasive rationale and mission that nonetheless tends to founder in its ability to mount convincing and nonparochial positions and arguments.

As I see it, comparative religious ethics and interreligious moral dialogue both share the same weakness: the lack of a justifiable and dependable conceptual lingua franca. If comparative religious ethics had addressed this issue all along, it would have had more to offer to interreligious dialogue, and at the same time, it would have been more able to share in this more recent field's sense of purpose and practical worth. Twiss and Grelle (1998a, b) elaborate their point as follows:

> In the first instance, scholarly discussion bogs down in technical arguments about alternative moral epistemologies, failing to address many substantive issues of practical moral concern ... In the second instance, interreligious dialogue has tended to bog down in difficulties about how meaningful moral agreements are to be secured when the parties seem unable to appreciate and work through the depth and complexity of their differences, ...

We must ask, though: what are those "alternative moral epistemologies"? If there was no shared moral epistemology, at some basic level, would comparative religious ethics be possible at all? It is hardly

controversial that every comparison requires a *tertium comparationis*, a common measure. According to the NSM approach to language, thought, and culture, in the area of ethics, a common measure is available in the concepts of "good" and "bad", which, evidence suggests, can be found as words in all languages. These two concepts, therefore, give us a basis—a common measure—both for comparative ethics and for interreligious dialogue. And not just "good" and "bad" as such but also their extensions, such as "to do something bad" and "to do something good", "to want to do good things to other people" and "to want to do bad things to other people", and so on, as illustrated in the Charter of Global Ethic in Minimal English.

The issue of a common measure is also of fundamental importance for communication, for "dialogue". In the introduction to his edited book *For All Life: Toward a Universal Declaration of a Global Ethic*, Leonard Swidler (1999b), one of the two Founding Directors of the Global Dialogue Institute, speaks of a "major shift from the Age of Monologue to the Age of Dialogue" (heading of section II) and strongly emphasizes the vital importance of a global dialogue about things that matter to all people, including the urgent need for a global ethic: "Knowingly to refuse dialogue today could be an act of fundamental human irresponsibility – in Judeo-Christian terms, a sin" (1999a: 11). Dialogue, Swidler writes, can be "understood as a conversation with someone who differs from us *primarily so we can learn…*". The plain fact, however, is that we *cannot* have a conversation with someone who differs from us if we do not have a common language.

To his credit, Swidler is not altogether oblivious to the matter of language, and when he offers his suggestions as to the general principles that ought to shape a Universal Declaration of a Global Ethic, he in fact starts with language:

> The Declaration should use language and images that are acceptable to all major religions and ethical groups; hence, its language ought to be "humanity based," rather than from authoritative religious books; it should be from "below," not from "above".

Yes indeed. But how does one put this ideal into practice? If the keywords (concepts) of the needed "humanity-based" language should come

"from below", not "from above", then, arguably, they should come from empirical investigations of words (concepts) that ordinary people across the globe speak with, and think with, not from the high register of English and other languages like English. Thus, the conceptual vocabulary of the "humanity-based" language should not be Anglocentric, or Eurocentric, but anthropocentric. This is in fact something that is very close to what Swidler himself says in his second principle: "Therefore, it should be anthropo-centric, indeed more, it must be anthropo-cosmo-centric, for we cannot be fully human except within the context of the whole of reality". But a set of principles, however well-conceived, is not sufficient, and indeed, the formulation of the Principles as set out by Swidler is another illustration of how difficult it is for European scholars writing in English to think outside the conceptual vocabulary of untranslatable concepts such as "reality", "dynamic", and indeed "dialogue"—and how difficult it is for them to imagine cultural worlds where people don't think with such concepts.

6.4.3 Other Uses and Functions of a Global Ethic

In a balanced and well-argued paper, American ethicist Sally King (1998) carefully examines various reactions to the Global Ethic movement, both positive and negative, and concludes by giving it cautious support. Addressing the question of how a Global Ethic could contribute to a better global order, King discusses six potential uses, which she groups into three broader categories of "theoretical-educational-cultural", "political", and "religious". I will limit myself here to commenting on the first of these three categories, in relation to which King makes four main points.

First, noting the pervasive influence of cultural and ethical relativism in modern Western culture, she points out that the Global Ethic document "has the potential to level the playing field somewhat, to give those wishing to resist relativism some materials to draw upon in the debate".

Second, she notes the potential of Global Ethic for value education: "if broadly affirmed by groups representative of a diverse society, the Global Ethic could be used as a basis of ethical instruction in public schools within pluralistic societies such as the United States and Britain". Further,

it could "provide legitimacy to the teaching of ethics in public schools without compromising the essential respect due all these groups in their diversity" (King 1998: 134).

Third, King points to the work of some other ethicists, in particular, to O'Connor's (1994) paper "Does a Global Village Warrant a Global Ethic?" (1994) and Duran's (1996) "Leonard Swidler's Draft of a Global Ethic: A Muslim Perspective", in order to highlight the importance of the distinction between law and ethics, and to the potential benefits of including this theme in school curricula.

Fourth, King points to the practical usefulness of the Global Ethic due to "its ability to rein in both extreme reactions to pluralism" and its potential for "negating the spectre of relativism without thereby establishing a pernicious absolutism" (King 1998: 136).

All these points are in my view well taken and important. The question remains, however: if there is some core of common morality that could be taught, how can this common core be articulated? King comments that "lying, stealing, and killing are generally held to be wrong" (p.132) but that it would be harder to articulate any broader transcultural consensus about the relations between men and women.

To start with the first of these points, is it true that "lying, stealing and killing are generally held to be wrong"? One observation that I would like to make here is that the concept of "wrong" is highly culture-specific: *wrong* is an English word without equivalents in other languages, and an ethic based on the twin concepts "right" and "wrong" has its roots in rationalism, and in modern Anglo discomfort with the apparent moral absolutism of the concepts "good" and "bad". Yet it is "good" and "bad", not "right" and "wrong" which are universal human concepts, and only they ("good" and "bad") can provide a framework for a global ethic, whether descriptive ("is") or inspirational and programmatic ("ought").

My second observation is that while "killing" is a universal human concept, and "stealing", a near-universal one, "lying" is neither universal nor near-universal. If carefully phrased, general norms repudiating "killing" and "stealing" can be formulated and, justifiably, included in a programmatic Global Ethic endorsed by representatives of many diverse human cultures. (Not *all* cultures, but *many* cultures, and in my view this would already be a cause for celebration.) This is not, however, the case

with "lying", as illustrated by the absence of any general norm against "lying" in The Ten Commandments. On the other hand, evidence suggests that all human languages have a word for "true" and that—within very diverse and culturally determined limits—wanting to say what is true is universally regarded as good and wanting to say what is not true, as bad. King herself emphasizes the importance for any Global Ethic of identifying "true common ground". From my perspective, this must include *conceptual* (and therefore lexical) common ground. The fact is that the concepts "true" and "not true" are indeed part of that conceptual common ground (and that, as evidence suggests, all languages have a word meaning "true", but not all have a word meaning "lie").

King stresses the need to distinguish between "is" and "ought" statements in the formulations of Global Ethic, that is, between ethical norms which are in fact shared by many diverse human groups (e.g., the norm against killing) and those which the proponents and "framers" of Global Ethic believe *ought* to be shared. She observes that there is an "is/ought struggle" being waged in the pages of the Ethic, which can be exemplified in the treatment of "male-female equality":

> The fourth "irrevocable directive" asks the representatives of diverse religious and cultural groups to affirm a "commitment to a culture of equal rights and partnership between men and women" and explicitly condemns "patriarchy, domination of one sex over the other, exploitation of women", and so on (Küng and Kuschel 1993b: 32). Swidler's version states even more explicitly: "Women and men are inherently equal and all men and women have an equal right to the full development of all their talents" (Swidler 1999b: 4). These are well and good as "ought" statements, but surely no one could seriously propose that these statements accurately reflect "an ethic [that] already exists within the religious teachings of the world". (Küng and Kuschel 1993b: 18)

There can be no quarrel about the need to distinguish between "is" and "ought" statements, but from my perspective, the statements of the fourth "irrevocable directive" quoted above are *not* "well and good as 'ought' statements" either, because they are not cross-translatable. The words "men" and "women" are universal, but the rest of the vocabulary used in these statements is not. Even leaving aside the contested concept of "rights", words

like *equal*, *partnership*, *patriarchy*, *domination*, *sex*, *exploitation*, *inherently*, *development*, and *talents* are highly language-specific and utterly unsuitable as tools for a dialogue between different cultures, religions, and traditions.

The Charter of Global Ethic in Minimal English proposed in this chapter includes two norms referring to men and women:

[3] It is very bad if men want to do very bad things to women.

[7] It is very bad if men think like this about women:
"There are two kinds of people. People of one kind are men, people of this kind are above people of the other kind. People of the other kind are women."

What I see as the main virtue of these two norms as formulated here is that they are expressed in universal, cross-translatable words and so can be presented at any "roundtable". Whether they are accepted by everyone or not, everyone can know exactly what they say, and thus they can provide a basis for a genuine dialogue, not for a pseudo-dialogue based on English concepts (such as "patriarchy", "domination", "exploitation", or "partnership"). In terms of content, the proposed norms about men and women here may seem fairly minimalist, but this, too, could make them a good starting point for a cross-religious and cross-cultural discussion at a "roundtable". If these two minimalist rules are accepted by a culturally and religiously diverse group, then further, more demanding norms can be formulated in the same universal words, and further dialogue can be undertaken—again, on the basis of genuine mutual understanding and without conceptual Anglocentrism.[1]

6.5 Conclusion

To conclude, the globalized world needs a global ethic. But to be globally shared, and globally accessible, this global ethic needs to be formulated in words and phrases that are cross-translatable. The "Charter" proposed here may not be perfect, but at least it offers a possible platform for a global discussion, without excluding anyone and without privileging Anglo English. While it is formulated in words of Minimal *English*, it is at the same time expressed in what might be described as the vocabulary

of "Common Human". What I mean by that is that every word used in the proposed charter belongs to one of two sets: either the set of universal semantic primes (established through decades of NSM-guided cross-linguistic research) or to the set of widely attested semantic molecules (under investigation in the same research program).

The proposed Charter of Global Ethic is different in this respect from many other texts written in Minimal English, including my own "Story of God and People in Minimal English" (Wierzbicka 2017; forthcoming). Experience indicates that most such texts need to be augmented in their vocabulary with some English words belonging to particular thematic domains and cultural spheres. For example, the vocabulary of "The Story of God and People" needed to be augmented by words like "sheep", "shepherd", "lamb", "king", "soldiers", "read", "write", "bread", and "wine" and a number of others particularly important to biblical culture and to the story told in the Gospels.

No such words, however, have been included in the Charter of Global Ethic as proposed here. The reason why in this case it has been possible to stay very close to the shared human vocabulary lies in the nature of this particular topic: the search for some ethical principles and ideals which could be envisaged by many human groups, at least as a starting point for discussion.

There are, no doubt, some other domains where it may be possible to say something of interest and importance without augmenting the shared lexical core of most, if not all, human languages, or augmenting it only very slightly. Just how much Minimal English needs to go beyond that common core to be most useful for a particular purpose, and a particular domain, remains to be seen.

Appendix A: Charter of Global Ethic in Minimal English

[A] IT IS VERY BAD IF PEOPLE WANT…

[1] It is very bad if people want to do very bad things to other people.
[2] It is very bad if people want to kill other people.
[3] It is very bad if men want to do very bad things to women.
[4] It is very bad if people want to say many things to other people if they know that these things are not true.

[B] IT IS VERY BAD IF PEOPLE THINK LIKE THIS…

[5] It is very bad if people think like this about some people:
"People of this kind are not like other people, they are below other people."
[6] It is very bad if people think like this about people:
"I am someone of one kind. People of this kind are not like other people. They are above other people"
[7] It is very bad if men think like this about women:
"There are two kinds of people. Men are one kind, they are above the other kind. Women are the other kind".
[8] It is very bad if people think like this about people:
"People of many kinds live on Earth. People of some of these kinds are bad people".
[9] It is very bad if people often think like this about many things:
"This is not mine; it is someone else's. I want it to be mine".

[C] IT IS GOOD IF PEOPLE WANT…

[10] It is good if people want to do good things for other people.
[11] It is good if people want good things to happen to other people.

[D] IT IS GOOD IF PEOPLE DON'T WANT…

[12] It is good if people don't want to do bad things to other people.
[13] It is good if people don't want bad things to happen to other people.
[14] It is good if people don't want to think like this about any other people:
"This someone did something very bad to me.
Because of this, I want to do something very bad to this someone".
[15] It is good if people don't want to think like this about anybody for a long time:
"This someone did something very bad to me".

[E] IT IS GOOD IF PEOPLE FEEL...

[16] It is good if people feel something good towards other people.
[17] It is good if people don't want to feel something very bad towards other people.
[18] It is good if people feel something when they know that something very bad is happening to someone in the place where they are.
It is good if they feel something good towards this someone because of this.
It is good if they want to do something good for this someone because of this.

[F] IT IS GOOD IF PEOPLE THINK LIKE THIS...

[19] It is good if people think like this about all other people:
"This someone doesn't want to feel something very bad for a long time. This someone wants to feel something very good for a long time. This someone is someone like me."

[20] It is good if people think like this about all people:
"I know that there is something very good in this person, because I know that there is something very good in all people."

[21] It is good if people think like this about some other people:
"These people can't do very much, very bad things can happen to them because of this. It is good if other people want to do many good things for these people."

[22] It is good if people think like this about children:
"Something very bad can happen to children if other people don't do many good things for them. Because of this, it is good if other people want to do many good things for them."

[23] It is good if people think like this about living creatures of many kinds:
"These creatures can feel something very bad, like people can feel something very bad. Because of this, I don't want to do some things to these creatures."

[24] It is good if people think like this about the Earth:
"Many people live on Earth now, many other people will live on Earth after. Very bad things can happen to these other people if people do some things on Earth now. I don't want these bad things to happen to these other people. Because of this, I don't want to do some things."

Appendix B: A Charter of Global Ethic in Minimal Polish (see Wierzbicka 2015b)[2]

[A] JEST BARDZO ŹLE, JEŚLI LUDZIE CHCĄ....

[1] Jest bardzo źle, jeśli ludzie chcą robić bardzo złe rzeczy innym ludziom.
[2] Jest bardzo źle, jeśli ludzie chcą zabijać innych ludzi.
[3] Jest bardzo źle, jeśli mężczyźni chcą robić bardzo złe rzeczy kobietom.
[4] Jest bardzo źle, jeśli ludzie chcą mówić dużo rzeczy innym ludziom, jeśli wiedzą,
że te rzeczy to nieprawda.

[B] JEST BARDZO ŹLE, JEŚLI LUDZIE MYŚLĄ TAK….

[5] Jest bardzo źle, jeśli ludzie myślą o innych ludziach tak:
„Ludzie tego rodzaju to nie są ludzie tacy jak inni ludzie, oni są poniżej innych ludzi."
[6] Jest bardzo źle, jeśli ludzie myślą o innych ludziach tak:
„Ludzie tego rodzaju to nie są ludzie tacy jak inni ludzie, oni są ponad innymi ludźmi."
[7] Jest bardzo źle, jeśli mężczyźni myślą o kobietach tak:
„Są dwa rodzaje ludzi, jeden rodzaj to mężczyźni, ludzie tego rodzaju są ponad ludźmi
tego drugiego rodzaju, ludzie tego drugiego rodzaju to kobiety."
[8] Jest bardzo źle, jeśli ludzie myślą o ludziach tak:
„Ludzie wielu rodzajów żyją na Ziemi.
Ludzie niektórych z tych rodzajów."
[9] Jest bardzo źle, jeśli ludzie często myślą o wielu rzeczach tak:
„To nie jest moje, to jest kogoś innego, chcę, żeby to było moje."

[C] JEST DOBRZE, JEŚLI LUDZIE CHCĄ….

[10] Jest dobrze, jeśli ludzie chcą robić dobre rzeczy dla innych ludzi.
[11] Jest dobrze, jeśli ludzie chcą, żeby dobre rzeczy działy się innym ludziom.

[D] JEST DOBRZE, JEŚLI LUDZIE NIE CHCĄ….

[12] Jest dobrze, jeśli ludzie nie chcą robić złych rzeczy innym ludziom.
[13] Jest dobrze, jeśli ludzie nie chcą, żeby złe rzeczy działy się innym ludziom.
[14] Jest dobrze, jeśli ludzie nie chcą mysleć o nikim tak:
„Ten ktoś zrobił mi coś bardzo złego, z tego powodu ja chcę zrobić coś bardzo złego temu komuś"
[15] Jest dobrze, jeśli ludzie nie chcą myśleć o nikim przez długi czas tak:
„Ten ktoś zrobił mi coś bardzo złego."

[E] JEST DOBRZE, JEŚLI LUDZIE CZUJĄ….

[16] Jest dobrze, jeśli ludzie czują coś dobrego do innych ludzi.
[17] Jest dobrze, jeśli ludzie nie chcą czuć nic bardzo złego do innych ludzi.
[18] Jest dobrze, jeśli ludzie czują coś, kiedy wiedzą, że coś bardzo złego dzieje się komuś w miejscu, gdzie są:
Jest dobrze, jeśli czują coś dobrego do tego kogoś.
Jest dobrze, jeśli chcą zrobić z tego powodu coś dobrego dla tego kogoś.

[F] JEST DOBRZE, JEŚLI LUDZIE MYŚLĄ TAK….

[19] Jest dobrze, jeżeli ludzie myślą tak o wszystkich innych ludziach:
„Ten ktoś nie chce czuć przez długi czas czegoś bardzo złego,
ten ktoś chce czuć przez długi czas coś bardzo dobrego.
Ten ktoś to ktoś taki, jak ja."

[20] Jest dobrze, jeśli ludzie myślą tak o wszystkich innych ludziach:
„Wiem, że jest coś bardzo dobrego w tym kimś,
bo wiem, że jest coś bardzo dobrego we wszystkich ludziach."

[21] Jest dobrze, jeśli ludzie myślą tak o niektórych innych ludziach:
„Ci ludzie nie mogą robić wielu rzeczy.
z tego powodu jest dobrze, jeśli inni ludzie chcą robić dużo dobrych rzeczy dla tych ludzi."

[22] Jest dobrze, jeśli ludzie myślą tak o dzieciach:
„Bardzo złe rzeczy mogą się stać dzieciom jeśli inni ludzie nie robią dla nich wielu dobrych rzeczy.
Z tego powodu jest dobrze, jeśli inni ludzi chcą robić dużo dobrych rzeczy dla dzieci."

[23] Jest dobrze, jeżeli ludzie myślą tak o żywych stworzeniach wielu rodzajów:
Te stworzenia mogą czuć coś bardzo złego, tak jak ludzie mogą czuć coś bardzo złego.
Z tego powodu nie chcę robić pewnych rzeczy tym stworzeniom."

[24] Jest dobrze, jeśli ludzie myślą o Ziemi tak:
„Dużo ludzi żyje na Ziemi teraz, wielu ludzi będzie żyć na Ziemi potem.
Bardzo złe rzeczy mogą się stać tym innym ludziom jeśli dużo ludzi będzie robić pewne rzeczy na Ziemi teraz.
Nie chcę, żeby tak się stało tym innym ludziom.
Z tego powodu nie chcę robić pewnych rzeczy teraz."

Notes

1. Unlike many other commentators on Global Ethic, King does address also the question of the words in which any shared moral norms can be formulated. Thus, she writes: "We know what it means if language cannot be found that all will affirm: it means there is no unity on this point of moral behaviour" (King 1998: 132). At the same time, she is wary of any manipulation of words which might create an illusion of consensus.
2. This version of the Charter of Global Ethic in Minimal Polish is slightly different from the one included in Wierzbicka (2015b). The differences are minor.

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7

Torture Laid Bare: Global English and Human Rights

Annabelle Mooney

The prohibition against torture is a well-settled, absolute right in international law and in human rights. As such, it presents an ideal case to understand what is at stake in human rights more generally. In this chapter, I consider the definitions of 'torture' contained in the United Nations Convention Against Torture and the Rome Statute establishing the International Criminal Court. Being clear about what torture is from a legal point of view is important in protecting individuals. I thus offer a definition of torture in Minimal English. This offers a way of thinking about the being at the heart of human rights: the human person.

7.1 Introduction

My interest in human rights has always been in their defence. I am a firm believer that human rights are a positive force. They should be universally

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recognized and enforced. It is this universality that I started with when I began working on human rights. And it was here that my experiences as one of Anna Wierzbicka's students helped enormously. In the 1990s I had the pleasure of attending her classes at the Australian National University. While I was not a good student, Anna nevertheless managed to teach me a number of valuable lessons. The first was that it was important to be precise: that it is crucial when considering linguistic meaning to think clearly and to express things exactly. Second, at a time when cultural relativism was particularly fashionable, it was a revelation to learn that human languages shared so much. Learning about Natural Semantic Metalanguage (NSM) and the common core of human language and meaning was shocking in a thoroughly positive way.

The idea that all humans share something is both precious and important. Indeed, there is a line I remember Wierzbicka using in a semantic explications that has long stayed with me. It describes two people being 'part of the same thing'. This phrase struck me at the time as a poetic articulation of what one finds in close relationships. I came to see that it also captures the relationship that holds between all people. It was this that I focussed on when I started to think about what human rights *should* be. Human rights should protect that 'thing' that we are all a part of.

Naive as I was, I had thought that it would be easy to set out what I thought human rights should be. What I found instead is that stating what should be obvious is extremely difficult. NSM, however, sustained me. While it may not have always been that which I explicitly discussed, it was always in the back of my mind. The idea that all people are part of the same thing is both profound and productive. With Minimal English, the task of articulation has become a little easier. It is now possible to use (as I do below) such terms as 'government' and 'country'.

In this chapter, I focus on torture and I do so for three reasons. First, protection from torture is very clearly a human right. While it may not always be discussed in the human rights frame, protection from it is recognized as a fundamental (human) right.

Second, torture is separately prohibited and legal definitions are provided.

Finally, torture allows us to see the human at the heart of human rights, a person with a body and a mind (Mooney 2014). Before it is possible to

see what torture tells us about being human and human rights in general, it is necessary to document how the term is currently understood in law.

It is well established that torture is prohibited under international law. But as Burchard (2008: 160) notes: '"Torture" is a treacherous concept, because the habitual and intuitive name obfuscates the need for both definitional clarity and for definitional revisions…', most notably in the light of 'new' forms of torture. Indeed, protections against torture may be threatened by the vague terms included in the United Nations Convention Against Torture discussed below (Harper 2009: 912–3). Examining the semantics of the torture prohibited at international law is thus valuable for two reasons. First, as it is proscribed and nation states have a duty to prevent torture, it is crucial that both nations and individuals understand what it is. This becomes even more urgent in the light of new forms of torture ('clean methods', Rejali (2009)) and arguments for more developed judicial recognition of psychological torture (Cunniffe 2013; Luban and Shue 2011). While few states admit to torture, it is clear that many states participate in actions which nevertheless amount to torture (Cobain 2010; Rejali 2009).

Second, as torture is absolutely prohibited and as it is a crime against an individual, it provides a very useful way of thinking about human rights more generally. That is, I want to suggest that an understanding of the international law definition of torture provides us with a way of putting both the human body and language at the centre of considerations of human rights.

In this chapter, I take a narrow focus. I examine the definition of torture provided in the United Nations Convention Against Torture or CAT (UN 1984), part of international human rights law, and the definition found in the Rome Statute establishing the International Criminal Court (ICC 1998), part of international humanitarian law (Burchard 2008: 161). After presenting the original texts and providing some commentary on the necessary legal elements of torture, I provide an explication of 'torture' in Minimal English. As legal scholarship in the field of torture makes clear, torture is often defined in relation to 'cruel, inhuman or degrading punishment or treatment' (often referred by the acronym CID), even though definitions of CID are even less clear than those provided for torture.

Finally, making reference to recent legal scholarship on torture, I argue that the understanding we have of the word 'torture' (as users of English) may obscure what is legally at stake and what the prohibition against torture seeks to protect: human beings. Our folk understandings of torture, especially perhaps the idea that only 'other' people torture, also obscure the fact that there are a great many things that nation states do to their people which would be legally seen as torture if the elements of torture were clearly laid out.

As Chaps. 2 and 3 in this volume make clear, Minimal English is a tool which can be used to clarify thought and forestall misunderstanding. As Wierzbicka notes, Minimal English 'can serve, whenever needed and appropriate, as a common auxiliary inter-language for speakers of different languages, and a global means for clarifying, elucidating, storing and comparing ideas' (2014a: 194). This is particularly helpful in the area of international law as the individuals involved (either as prosecutors, defendants, or other parties) come from a range of linguistic and legal cultures. In the following explications, I make use of the semantic molecules 'government' and 'country'. These are not likely to be universal or near universal, but they are necessary to the explication of internationally proscribed actions (cf. Chap. 3).

I begin by setting out the definitions of torture provided in international law. I focus on international law rather than domestic. As Klayman argues, 'no interpretation [of the meaning of torture] will be adequate if it merely remits the complainant to the definition of the laws of the state which allegedly injured him in the first place' (1978: 456).

7.2 The International Texts on 'Torture'

There are a number of treaties, conventions, and domestic and regional laws that forbid torture (see Association for the Prevention of Torture 2008; Weissbrodt and Heilman 2011). Torture is also prohibited by the International Criminal Court as a crime against humanity. In the case of human rights instruments generally, however, Klayman argues that a 'tendency exists to read humanitarian treaties and resolutions of organizations together in such a way as to suggest the emergence of a

general customary law of human rights that transcends the bounds of individual instruments' (1978: 453). In the case of torture, this is not particularly problematic. Torture is considered so unacceptable that it is generally accepted as falling under *jus cogens* (a peremptory norm of international law from which no derogation is allowed; Burchard 2008: 162; Harper 2009: 894; Lewis 2010: 93). Nevertheless, while the prohibition of torture is plain, how torture is defined is more variable.

Perhaps one of the reasons it was not defined is that what torture is seems to be obvious. Klayman's consideration of the discussions during the drafting of the UDHR (Universal Declaration of Human Rights) suggests that the meaning of 'torture' was generally considered to be self-evident, as discussion focussed rather more on definitions 'cruel and inhuman punishment' and on how much detail should be included in the prohibition against torture (1978: 458–9).[1] Moreover, the 'consensus of the Commission, in the words of Malik (Leb.), was that "the word 'torture' should be taken in its broadest meaning"' (Klayman 1978: 463). While this is useful in some respects, it is not particularly helpful in identifying the semantic core of the concept. Close attention to United Nations texts and to legal discussion of the crime of torture may, however, provide a more detailed picture.

Article 7 of the International Convention on Civil and Political Rights (ICCPR) reads:

> No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his free consent to medical or scientific experimentation.

It is worth noting that the first sentence of Article 7 reproduces Article 5 of the Universal Declaration of Human Rights. The ICCPR also makes it clear, in Article 4(2), that no derogation is possible (UN 1966). That is, it is not possible for nation states to suspend this protection, even in cases of war or national emergency. As is obvious, this is not a particularly useful account. It defines neither torture nor CID. And while the inclusion of non-consensual scientific experimentation is welcome, it is not clear whether this is torture or CID.

The Rome Statute (ICC 1998), establishing the International Criminal Court, includes 'torture' in Article 7, which establishes a list of crimes against humanity.

Article 7: Crimes against humanity

1. For the purpose of this Statute, "crime against humanity" means any of the following acts when committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack:

   (a) Murder;
   (b) Extermination;
   (c) Enslavement;
   (d) Deportation or forcible transfer of population;
   (e) Imprisonment or other severe deprivation of physical liberty in violation of fundamental rules of international law;
   (f) Torture;
   ….

(k) Other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health.

In section 2, 'torture' is defined.

(e) "Torture" means the intentional infliction of severe pain or suffering, whether physical or mental, upon a person in the custody or under the control of the accused; except that torture shall not include pain or suffering arising only from, inherent in or incidental to, lawful sanctions.

The United Nations Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) was opened in 1984 and came into force in 1987. Article 1 provides the most detailed definition of torture:

Article 1

1. For the purposes of this Convention, the term "torture" means any act by which severe pain or suffering, whether physical or mental, is

intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. It does not include pain or suffering arising only from, inherent in or incidental to lawful sanctions.

Article 2 of the Convention goes on to make clear that the prohibition against torture is absolute and that it is not a defence for an individual to argue that they were 'following orders'. It also contains an obligation for states to 'take effective legislative, administrative, judicial or other measures to prevent acts of torture in any territory under its jurisdiction'. The main difference between the Rome Statute and the CAT is that the former requires torture to be systematically used against a population for it to be considered a 'crime against humanity'. Nevertheless, the definitions of torture itself are similar. In summary, the four central features of torture are:[2]

- Severe pain or suffering, whether physical or mental.
- Intentional infliction of the pain and suffering.
- A purpose for the torture (e.g. confession, punishment, discrimination).
- Action is carried out by the state or an agent of the state.

I deal with each in turn in some detail and consider the relationship between torture and CID. Based on the actual wordings of the definitions, there are places where I would take issue with some of the legal commentary. However, I frame the definition narrowly rather than broadly.

7.2.1 Severe Pain and Suffering

The relative intensity of pain and suffering required for torture is difficult to specify. Being 'severe', it is clearly more than discomfort; however, exactly what 'severe' means depends on the context, the duration, and the

individual being subjected to punishment. The Committee Against Torture (which considers breaches of the Convention) has found the following all amount to torture:

> (1) restraining in very painful conditions, (2) hooding under special conditions, (3) sounding of loud music or prolonged periods, (4) sleep deprivation for prolonged periods, (5) threats including death threats, (6) violent shaking, and (7) using cold air to chill. (Hathaway et al. 2012: 827)[3]

The list is not exhaustive and 'some courts examine the *subjective* impact on the particular victim's physical or mental disposition, including the vulnerability of children and pregnant women'. This may even include 'social and cultural conditions' (Harper 2009: 902, 903).

In distinguishing CID from torture, the severity of the pain and suffering is an important element. But it is not clear what the difference is. It seems to be the case that pain and suffering that is thought to fall short of 'torture' may nevertheless constitute CID; yet, given that the severity of the pain and suffering required for torture is not specified, this too is difficult to evaluate.

One might think that duration of the treatment would be a defining feature. Sleep deprivation, for example, might only constitute severe pain or suffering if it is continued for some time. Other treatments, however, may be of very short duration and yet clearly result in severe pain and suffering. In relation to psychological and mental torture, US jurisprudence seems to require some kind of duration in terms of lasting after-effects. Luban and Shue, however, argue that this is a 'substitution trick': 'the trick of substituting a possible effect for its cause so that the cause itself ceases to constitute torture' (2011: 841). In short, duration by itself will not assist in distinguishing torture from CID though it may, in relation to some actions, be relevant.

It seems to me that understandings of the severity of the pain and suffering required may be related to the 'special stigma' that torture has, especially in contrast to CID (*Ireland v. the United Kingdom*, 5310/71, § 167). In this context, however, it is worth noting that the five techniques under consideration in this case (wall standing, hooding, subjection to noise, sleep deprivation, and deprivation of food and drink, ibid § 96)

have largely been found in subsequent decisions to amount to torture (see above). Nevertheless, the noun phrase 'special stigma' does seem to capture the severity intended. I return to this below.

7.2.2 Purpose

The purpose for the action is also commonly thought to be a defining feature of torture, especially in separating torture from CID. This does not appear to be fully settled. Nowak writes that the distinction between torture and cruel and inhuman punishment 'depends on the other requirements in Article 1 CAT; mainly whether inhuman treatment was used for any purpose spelled out therein' (2006: 822). However, given that the Convention includes the clause 'discrimination of any kind', and the Rome Statute fails to mention any reason for the infliction of pain or suffering (Rodley 2002: 469), it seems to me that there need not be an instrumental reason for torture to be torture; the pain and suffering may be inflicted gratuitously or for the gratification of the perpetrators. And while Rodley argues for the importance of purpose in defining 'torture' (2002: 483), this is not a universal view. Burchard, for example, notes that there are two different interpretative approaches: one exclusive of anything not mentioned in the CAT and the other more inclusive and expansive (2008: 170).

In any case, once an individual is under the control of the actor, any action that causes severe pain or suffering could easily be classified as 'punishment', and hence the torture could be construed as having that purpose. Violence against a person (whether mental or physical) committed by the state (or a representative) is reasonably characterized as 'punishment' because of the power asymmetry and the official 'standing' of the perpetrator.[4] Punishment may be unwarranted after all.

7.2.3 Intent

Intent is perhaps not quite so easy to deal with. Along with purpose, intent is commonly understood to help distinguish between torture and CID. But *what* is intended is at issue. Some argue that the perpetrator has

to intend to cause severe pain and suffering (Nowak 2006: 830). However, in the ad hoc tribunals (dealing with war crimes and crimes against humanity), it appears to be enough to intend the act or omission that then caused the pain or suffering (Burchard 2008: 168). Further, Hathaway, Nowlan, and Spiegel report that 'the Committee [Against Torture] does not require direct evidence of intent; it instead infers mens rea based on the totality of the facts and circumstances' (2012: 796).[5]

The issue of control here may again be central. If one takes the prototypical example of a prisoner, one can see that acts or omissions, whether intended to cause pain or not, will nevertheless be the responsibility of the institution. Given the corporeal and mental suffering involved in torture and CID, however, it is difficult to see why an objective understanding of intent should not operate. That is, it should be possible to infer intent from the results of the actions undertaken (rather than relying on what the actor claims about their intentions). It is possible that this should work on somewhat of a contextual sliding scale; some actions obviously cause great pain (in which case objective intent should prevail), while others less obvious cause great pain (where there may be some small leeway for subjective intent). However, given the severity of pain or suffering required for torture, it is difficult (though not perhaps impossible) to envisage cases of the latter.

It should also be noted that intention is not simply about acts but also about omissions. Noting the use of 'act' in the above definitions, Nowak argues 'Nothing in the TP [Travaux Préparatoires] indicate…that the drafters intended a narrow interpretation that would exclude conduct such as intentional deprivation of food, water and medical treatment from the definition of torture' (2006: 819). This is unusual for human rights law, because usually acts of omission are not enough to establish a breach of a right. Individuals have few positive rights. The difference here may again be connected to the 'control' that the actor has over the victim and, prototypically, their confinement. Nevertheless, it should be noted that one need not be a prisoner. As Klayman documents, at least in the drafting of the International Covenant on Civil and Political Rights, 'it was clear that the drafters intended the article to encompass both punishment of criminal prisoners as well as treatment of person who were not prisoners' (1978: 463).

7.2.4 Agent of the State

Finally, the CAT does make plain that the activity must be performed by an agent of the state, whether or not the state is fully cognisant of the activity. Given the stipulation that crimes against humanity are taken against a 'civilian' population in the Rome Statute, this also suggests the complicity of a state or a state-like entity in the activity of torture (Rodley 2002: 493; though this is sometimes not required, see Burchard 2008: 171). This has been given broader application too, as the Convention also requires that states do all they can to prevent torture and ill treatment (Harper 2009: 907). In the following, I orient to the prevailing conditions in relatively stable nation states and stipulate that the person performing the action be somehow part of, or at least sanctioned by, the government.

There is a final point to note as the last sentence in both definitions above is problematic. In stipulating that a lawful sanction cannot be torture, it seems to undo all that went before. I do not deal with that in this chapter (see Ingelse 2001: 216; Miller 2005: 20, 21; Nowak 2006: 812; Rodley 1997: pgh 8).

7.3 A Minimal English Script for the Meaning of 'Torture'

I now want to propose an explanatory Minimal English script for the meaning of 'torture', in international law and human rights discourse, in order to capture the four key characteristics discussed above. The script is presented in six sections.

'Torture' (as in 'Convention against Torture')

It can be like this:

1 Some people in one country are doing something to someone.
Because of this, someone feels something very very bad
like someone can feel something very very bad when something very very bad is happening to this someone's body.
This someone can't not think 'something very very bad is happening to me'.

2 [These people want to do this because they want this someone to do something. They know that this someone doesn't want to do it.]

3 These people are people of one kind, people of this kind are part of something, some other people are part of this something. This something is above many people in this country, like a government is above many people in a country.

4 Because these people are doing this to this someone, this someone feels something very very bad.

5 This is very very bad.

6 [When other people think about it, they can't not feel something very very bad because of this.]

Section 1 captures the doing of something to someone that makes them feel something very very bad. Note that the someone to whom the action is done need not be the same someone who feels something very very bad. A relative, spouse, or friend may be subjected to pain, suffering, or threats in order to make an individual do or feel something. While some might argue that there must be an intention that the action causes a very very bad feeling, the lines simply capture the intention of the person to undertake the action.

No distinction between mind and body is made in the Minimal English text. As torture can be both physical and mental (and perhaps more usually, both at once), the very very bad feelings attach to any and all 'parts' of the person. The use of 'feel', however, captures all of these. These lines (section 1) draw on Wierzbicka's (2014b) semantic explication for 'pain', which treats bodily pain as prototypical, but does not restrict the meaning solely to bodily pain. Further, while not all languages have a word for pain, most appear to have a term meaning 'feeling something bad in one's body' (Wierzbicka 2014b: 156). Wierzbicka also makes an important distinction between 'pain' and 'suffering', the latter not orienting to the body (2014b: 160). The reference to the body has been retained in the Minimal English text above, as it captures the prototypical understanding of torture without excluding less corporeal suffering. A line from Wierzbicka's explication of 'suffering' has been modified and included too ('this someone can't not think …') in order to indicate the inescapability of the situation.

Section 2 captures the intention to do the action and its purpose. While it is not clear to me that such a purpose is legally required, in order to satisfy the 'stricter' legal interpretations outlined above, it is included. This purpose can be understood as analogous to punishment, in which the punisher wants someone to 'feel something bad' and so does something to the person (see Wierzbicka 1996: 284). While Wierzbicka's explication of the word 'punishment' includes a positive evaluation (as the person being 'punished' is construed as having done something bad), this is not relevant for torture. From the legal texts considered above, punishment is certainly one 'reason' for such action, but the actions may also be used to 'encourage' a person to do something. Thus, I have included the line 'because they want this someone to do something'.

Section 3 captures the involvement of the government or something of that kind. Section 4 describes the very very bad feeling that the person has. Section 5 captures the very negative evaluation of action involved as evidenced by the clear international ban on torture. Section 6 is perhaps optional, though it too is intended to capture the force of international condemnation. The potential problem with section 6 is that people may indeed not feel something very very bad, especially if the victim is from a minority already discriminated against and dehumanized (see Stollznow 2008). Indeed, Stanley argues that 'victims of state crime do not tend to be seen as "victims"'. Rather,

> …they are either depicted in danger-linked ways (e.g. as 'subversives') or as being outside the human experience altogether (e.g. as 'vermin'). Through such devaluations, victims 'are put out of sight or below the threshold of moral vision' (Humphrey 2002: 32)… their perceived dangerousness and difference make them appear 'deserving' of state force…. (Stanley 2005: 585)

Thus, the bracketed inclusions in the definition are set in this way as while they may be prototypical, it is not clear that they are part of the conceptual core of the legal definition of torture.

This definition may fail to capture what people generally think of as 'illegal torture'. It may also fail to capture the 'special stigma' that we understand torture to have. I suggest that this is because we tend to think about torture in its prototypical physical realizations and in the context

of known historical cases (Scarry 1985). When we use the word 'torture' in everyday conversation to mean a range of unpleasant feelings, such use can be understood as a kind of hyperbole, clearly different from the prototypical understandings of 'real' torture. Generally, however,

> …the only scenario that we have in mind when we speak of torture is that of an evil state agent (torturer), locking a cuffed suspect in an interrogation room, deep in a dark basement while a single light is swaying above is head, and subjecting the suspect to extreme and severe pain and suffering. (Saif-Alden Wattad 2008: 1; see also Klayman 1978: 498)

This is supported by the Collins Wordbanks Online corpus, in which the most common postmodifier for 'torture' is the word 'chamber' (28/77 instances).

We also expect there to be visible physical evidence of the torture. 'A victim with scars to show to the media will get sympathy or at least attention, but victims without scars do not have much to authorize their complaints to a skeptical public' (Rejali 2009: 2). This too is supported by Wordbanks, as among the highest collocates for 'torture' are the following lexemes:[6] 'brutal' (11), 'execution' (30), 'rape' (20), and 'killing' (14). But torture often leaves no physical trace, as Rejali (2009) shows in his documentation of the history and range of 'clean torture' methods.

This gap between our folk understandings of 'torture' and the reality of those experiencing severe pain and suffering has been addressed elsewhere. For example, when trying to explain why the European Court of Human Rights does not (but should) recognize food deprivation as torture, Schechter writes:

> Requiring that an act retain traditional ideas of torture in order to be considered torturous may prevent the act of starving a prisoner, which is neither as visually striking nor as sudden as various medieval-era torture devices, from being considered torture. Depriving individuals of food or water produces the same, if not a higher, level of suffering as acts currently stigmatized as torture. (Schechter 2003: 1253)

In addition to the physical actions of clean torture, there are other forms that torture can take. It is worth noting that 'psychological' and

'mental' also figure in the Wordbanks corpus (both with 13 instances). Moreover, Cunniffe (2013) makes the case that psychological torture is not adequately legally recognized, while Luban and Shue (2011) detail various forms of mental pain that should also be recognized as torture (but are not currently) in US jurisprudence. In short, legal scholars have argued that 'torture' as judicially recognized at present fails to capture the range of human pain and suffering that international law prohibits. From the very beginning of the international prohibition of torture, it has been acknowledged that the infliction of severe physical or mental suffering can take many forms (Klayman 1978). But political expedience and perhaps the desire for nations not to be seen as torturing their own citizens have polarized our prototypes, such that we are more focused on physical pain that leaves visible marks rather than on the full range of pain and suffering. These prototypes may exemplify but do not exhaust the legal definition of 'torture'. The Minimal English definition is important exactly because of the existence of these prototypes, as it provides a more neutral and objective account of the legal definition of torture.

7.4 A Minimal English Script for 'Cruel, Inhuman or Degrading Treatment'

As noted above, the difference between torture and CID appears to be one of degree. Pain and suffering that falls short of the severity of torture may constitute CID. Further, it is not clear whether CID needs a purpose (Rodley 2002: 483). Thus, an explanatory script or definition for CID would be as follows:

'Cruel, Inhuman or Degrading Treatment'

It can be like this:

1 Some people in one country are doing something to someone.
Because of this, someone feels something very bad like someone can feel something very bad when something very bad is happening to this someone's body.
This someone can't not think 'something very bad is happening to me'.

2 These people want to do this.

3 These people are people of one kind, people of this kind are part of something, some other people are part of this something. This something is above many people in this country, like a government is above many people in a country.

4 Because these people are doing this to this someone, this someone feels something very bad.

5 This is very bad.

6 [When other people think about it, they can't not feel something very bad because of this.]

The lower severity has been captured by changing all instances of 'very very bad' to 'very bad'. It seems clear that the threshold for CID must be more than simply 'bad', but as it is less severe than torture, it cannot be 'very very bad'. Further, the purposive element in section 2 has been deleted, leaving only the intention of the people involved to undertake the action. It should be remembered that such an action may also be an omission and this may be even more commonly the case for CID than for torture.

7.5 On the Relation of Torture to Human Rights

I have argued that Minimal English can make it clear what is included in the international prohibitions against torture and CID. And while translation from legal language to plain English is usually fraught with difficulty (Tiersma 2001), as such a move may delete or distort the specific meanings of legal language (Wolcher 2006), the texts here present an unusual case. The CAT is largely devoid of legalese. In part, this is precisely because it is an international convention; it is relevant to all legal systems while referencing none of them specifically. The international law texts on torture thus provide valuable insight into human rights more generally.

Human rights is a complex and contested field as Brown observes, 'Virtually everything encompassed by the notion of "human rights" is the subject of controversy' (1997: 41; see also Dembour 2010; Parekh 2007). Protection from torture, however, is a well-recognized human right.

Turner, for example, regards 'torture' as the most 'fundamental denial of human rights' (2006: 9). The prominent position given to torture aligns with Turner's focus, in his defence of the currently recognized human rights, both on corporeality and pain. The fact that the right against torture is absolute also suggests that at least somewhere in existing human rights, there is an understanding that the embodied person (and all that this entails) matters. While this is not always explicit, in the prohibition against torture, we see the being at the heart of human rights: a human person. The importance of the corporeality in human rights more generally has been argued for. Sociologist Bryan Turner in *Vulnerability and Human Rights* starts from the perspective that 'vulnerability defines our humanity and is …. the common basis of human rights' (2006: 1), while Anna Grear (2010), in *Redirecting Human Rights*, argues that the legal subject of human rights needs to be understood as an embodied person.

Turner and Grear argue that the vulnerability and corporeality of humans are intimately connected to human rights. Both vulnerability and corporeality are visible in the Minimal English scripts for the concepts of torture and CID. To understand these concepts, we need to pay attention to humans as embodied beings ('body'), as thinking and feeling beings. More generally, the semantic primes included in NSM provide a full picture of what a person is. Thinking about a person in relation to actions that constitute torture further allows us to see why torture is internationally sanctioned, as well as to understand what other kinds of human rights are entailed by the corporeal person.

7.5.1 Fundamentally Torture

I suggest that torture is so fundamentally wrong not only because a person feels something very very bad, but because it is so obviously dehumanizing (see Stollznow (2008: 184) for an NSM explication of dehumanization). Whether the tortured individual is thought of as a person or not, the actions make clear that they are not being treated as one. The connection between torture and dehumanization is so obvious it is difficult to articulate. I suggest that it can be done, that the obviousness can be brought to light, by thinking about the presumptions that are operation.

As stated above, the minimal requisite intention in torture is to perform the action. There need be no intention to make the person feel something very very bad. The link between the two, then, must be obvious in some way. While we might think of intention as being about the real state of a person's mind, in this context the real state of the person's mind is irrelevant. What is relevant can be put as follows: what would a 'reasonable person' think would happen to another person should they be subjected to a particular action (see Wierzbicka 2007; see also Luban and Shue 2011: 852). While acknowledging the problems with the history and cultural baggage of this legal concept, I am attempting to draw out from the law, in its own terms, the hidden human person. Specifically, I want to suggest that the prohibition against torture must rely on a common shared understanding of what people experience in particular settings.

Franck and Prows write 'A presumption stipulates that if one fact (or the commission, or omission of an act) can be demonstrated, then another may (or must) be inferred from that' (2005: 200). In the case of torture and the experience of feeling something very very bad, the presumption is a factual one (rather than a legal one) although there may be legal consequences (Franck and Prows 2005: 204). Franck and Prows' survey demonstrates that presumptions operate in legal systems around the world. In the case of torture, we don't even need to venture very far. Cutting bodies, beating the soles of a person's feet, and depriving of sleep, food, and water all obviously result in feeling something very very bad. For psychological torture, the specific cultural, religious, and other attributes of a person may also be taken into account in deciding when torture has taken place (Miller 2005: 10 on ECHR). The connection between actions and effect on an individual is here a question of 'common sense' (Franck and Prows 2005: 197). For example, in *Morales v Guatemala*, the Inter-African Commission on Human Rights found evidence of torture 'on the basis of autopsies that reliably revealed signs of beating, tying, and visible cuts and burns to the victims face and body' (Harper 2009: 900).

> [the] damage inflicted on the victim is evidence because it is only human nature that any person subjected to the aggression and abuse that she endured (unlawful detention, torture, and death) experiences profound

> physical and mental suffering….the Court considers that no evidence is required to reach such a conclusion. (cited in Harper 2009: 900)

It would be possible to compare these presumptions to some well-established common law principles. In British common law, in the tort of negligence, we find *res ipsa loquitur*: the thing speaks for itself. This allows the court to infer negligence from the evidence.[7] This has been described as 'a common sense approach, not limited by technical rules, to the assessment of the effect of evidence in certain circumstances' (per Megaw LJ, *Lloyde v West Midlands Gas Board*, [1971] 2 All ER 1240 at 1246). One might consider from contract law the concept of the 'officious bystander'.[8] But all this simply reiterates what has already been established by Franck and Prows; presumptions operate in the legal system.

> At one level, presumptions occupy a rather obscure niche in the law of evidence. At another, they are an important part of a profound debate about the nature and origins of our perceptions of reality: our ways of seeing, and reasoning about, the external world. Obviously, this cultural aspect of the matter is of importance to judges, lawyers, and, indeed, everyone. (Franck and Prows 2005: 200)

We can use the label of presumptions to make explicit not only our ways of seeing and reasoning about the world (which are very often culturally conditioned) but also our experience of the world—the very fact of our human existence.

Franck and Prows make a further connection, one particularly useful in to those of us working with Minimal English. Specifically discussing international law, they write:

> … to the extent that it makes use of presumptions, [international law] implicitly assumes that there must exist an international, cross-cultural fund of common experience. (Franck and Prows 2005: 232)[9]

Asking whether this is reasonable, especially in the light of Hume's theory of human understanding, they rely on imagination and empathy.

> Presumptions – the drawing of the inference *if A then B* – involve a prediction that may be based (as Hume believed) always on actual experience or perhaps also, or alternatively, on an imaginative capacity to 'experience' vicariously the actual impact of external events on others than oneself. (Franck and Prows 2005: 235)

A distinction is drawn between what is 'known' through direct experience and that which be 'known' even in the absence of this. This explains their reliance on empathy and imagination—a kind of knowing through experiential analogy.

It seems to me that, in the case of torture at least, this makes the point rather too specific. One does not need to have experience of being beaten to know that this will cause a person to feel something very very bad. One need not have experienced starvation or even hunger to know that deprivation of food over a period of time will cause a person to feel something very very bad. It is obvious, from what is known about the human needs of the body, that lack of food will inevitably cause death and that such a process will be painful. Our experience of our own human bodies is detailed enough in relation to our individual lives that 'imagination' seems unnecessary. It seems to me that in the realm of physical survival and the human condition more generally, there are facts that are indisputable.

The legal definition of torture thus makes it possible to see what a human is and what we depend on. Humans have a body; we think, feel, see, do, want, hear, and say. This body depends on food and water. In turn, the ability to secure food and water depends on a functioning environment. These are common sense presumptions. Moreover, they suggest that a set of human rights that takes full consideration of the embodied person should include (1) environmental protection, (2) provision of basic needs (food, water, shelter, and sleep), and (3) a right against dehumanization (the right to be treated as a thinking, feeling, seeing, wanting, saying, being). As I have argued elsewhere, this is not about human nature; this is about the nature of being human (Mooney 2014). In the specific case of torture, and indeed more generally, Minimal English (built on the foundation of NSM) allows us to see what this nature is.

7.6 Conclusion

The very premise of NSM, on which Minimal English is built, is that for all our cultural differences, people have some things in common. The semantic primes and their syntax are universal. Minimal English allows us to clearly identify our cultural concepts and our conceptual baggage. But it also allows us to see what we share.

Torture may be culturally inflected, but the underlying components are not. The actions used to torture a Muslim male detainee may differ from those used to torture a Christian woman. But by taking into account their respective bodies, cultures, and beliefs, it is a simple process of common sense, of presumption, to discover what would cause them to feel something very very bad. Considering people in their embodied state, with thoughts, feelings, and wants, does not render all individuals identical. We may not all want the same things, but we all want some things. We may not all think the same things, but we all think some things. As paradoxical as it sounds, we are all the same in our specific individuality. Protecting this is fundamental to the prohibition on torture and to human rights more generally.

Torture is a powerful term. In English it carries with it a deal of conceptual, visual, and visceral baggage. We think we understand the term. But how we understand 'torture' and how it is legally defined need not be the same thing. Moreover, it would be surprising if 'torture' turned out to be a universal lexeme or concept. It is thus crucial that we are clear about what it refers to and what is thus legally prohibited. While no one is suggesting that people use Minimal English all the time, the clarity of thought that it demands and the understanding that its use can lead to may be extremely valuable. In the case of international law in general and international human rights law in particular, using Minimal English to articulate, discuss, and refine concepts and texts is well worth doing. Minimal English provides an accessible and flexible tool for dealing with disagreement, conducting negotiations, and reaching consensus. As it draws on and extends NSM, it is also perfectly placed to articulate what matters to people and to describe what a person is.

Explicating the legal concept of 'torture' with Minimal English reminds us of what a person is and, exactly because of this, why torture is prohibited. It has also foregrounded the importance of presumptions, not just in relation to legal reasoning but in relation to human life more generally. Such understanding is useful in itself, but it may also assist in identifying acts of illegal torture and perhaps even stopping them. Minimal English is well placed to make an important contribution to law generally and international law in particular.

Notes

1. In contrast, there was a deal of discussion in the drafting of the International Covenant on Civil and Political Rights (Klayman 1978: 461 ff).
2. Rodley argues that there are three pillars that define torture though he draws on the UN Declaration against Torture, the first definition available. The three pillars are: 'relative intensity of pain or suffering inflicted: it must not only be severe, it must also be an aggravated form of already prohibited (albeit undefined) cruel, inhuman or degrading treatment or punishment'; 'the purposive element: obtaining information, confession, etc.'; and 'the status of the perpetrator: a public official must inflict or instigate the infliction of pain or suffering' (2002: 468).
3. All these were part of a response to Israel's 1997 country report.
4. Rodley notes that what is excluded are 'private acts for purely personal ends' (2002: 493).
5. They argue that torture is a specific intent crime, requiring intention to perform the treatment for a specific purpose (2012: 805). This intent, however, can be inferred (2012: 802; see also Harper 2009: 899).
6. Out of a total of 890.
7. 'There must be reasonable evidence of negligence. But, where the thing is shown to be under the management of the defendant, or his servants, and the accident is such as, in the ordinary course of things, does not happen if those who have the management use proper care, it affords reasonable evidence, in the absence of explanation by the defendant, that the accident arose from want of care' per Erle CJ, Scott v London and St Katherine Docks Co (1865) 3 H & C 596 at 600.

8. 'For my part, I think that there is a test that may be at least as useful as such generalities. If I may quote from an essay which I wrote some years ago, I then said: "Prima facie that which in any contract is left to be implied and need not be expressed is something so obvious that it goes without saying; so that, if, while the parties were making their bargain, an officious bystander were to suggest some express provision for it in their agreement, they would testily suppress him with a common 'Oh, of course!'"

   At least it is true, I think, that, if a term were never implied by a judge unless it could pass that test, he could not be held to be wrong' per MacKinnon LJ *Southern Foundries* (*1926*) *Ltd v Shirlaw* [1939] 2 KB 206 at 227.
9. If there is any reluctance on behalf of the judiciary to rely on presumptions, argue Franck and Prows, it is because of their shared 'culture of deference to sovereignty and a reluctance to make any more law than absolutely necessary' (2005: 243). Somehow intervening in this cultural homogeneity is, they suggest, the challenge.

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8

Talking About the Universe in Minimal English: Teaching Science Through Words That Children Can Understand

Anna Wierzbicka

This chapter originated as a talk given to undergraduate students in a course on science communication, in the Faculty of Science Communication at the Australian National University in August 2016. The talk, in turn, was based on a plenary lecture given at the 'Copernicus Festival' organized by the Copernicus Centre for Interdisciplinary Studies in Kraków, Poland, in May 2015.

8.1 Starting Points for How to Communicate Science

I would like to start this chapter with an example of how *not* to communicate science. It is a quote from a popular science book *Why Can't Potatoes Walk*. It is, in many ways, a very nice book, which I came across in the context of spending time with my grandchildren. The quote is

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from a chapter called 'What is an animal'. I think it illustrates some of the basic problems in communicating about science.

What Is an Animal?

> What is the minimum requirement for something to be considered an animal? What about coral? And what is different about a plant or a fungus?
>
> Let's start with the minimum: an organism is a biological entity capable of replication or of transferring genetic material. The definition of organism includes, besides plants, animals, etc., even such things as seeds and pollen.
>
> Plants and animals are composed of cells with a true nucleus surrounded by a thin film, a membrane (which is why they are called eukaryotic, meaning "with a true nucleus").
>
> Animals are multicellular organisms that are part of the animal kingdom. They are mobile and depend on eating other living or dead organisms for their survival. With few exceptions, animals have muscles, a nervous system, and an internal cavity in the body, intended for the digestion of food. (Janzon 2013)

The concept of 'animal' may seem intuitively fairly clear to many people, but apparently if you want to explain it as a scientist, you come up with a lot of words which are nearly incomprehensible to ordinary people. This is an example of explaining something reasonably clear and simple through something which is far more obscure and far more complex. Clearly, as a 'communication strategy', this will not be successful, and nor will it lead to clarity of understanding.

As mentioned in earlier chapters, the seventeenth-century German philosopher, Gottfried Wilhelm Leibniz, wrote extensively this problem. I would like to quote two short extracts here:

> Although infinitely many concepts can be understood it is possible that only few can be understood in themselves. Because an infinite number can be constructed by combining a few elements. Indeed, it is not only possible but probable, because nature usually achieves as much as possible with as few elements as possible, that is to say, it usually operates in the simplest possible way. (Couturat 1903: 430; translation AW)

> If nothing could be understood in itself nothing at all could ever be understood. Because what can only be understood via something else can be understood only to the extent to which that other thing can be understood, and so on; accordingly, we can say that we have understood something only when we have broken it down into parts which can be understood in themselves. (Couturat 1903: 430; translation AW)

Leibniz is saying that one should not try to explain everything and that indeed one cannot explain everything. We have to take some things as indefinable. And then once we have decided which ones do not need to be explained, we can seek to explain all other concepts and ideas through those which are indefinable. If one does not start by taking some concepts as indefinable, first of all one will end up with an infinite regress, because there will never be an end of one's explanations. Second, when people try to explain ideas which are already quite simple, they very quickly end up with a circular definition, a so-called vicious circle. (You can probably spot a vicious circle in the paragraph quoted above about 'animals': 'Animals are multicellular organisms that are part of the animal kingdom'). And, finally, one will be constantly explaining something which doesn't need an explanation because it is intuitively clear.

Leibniz's main ideas, in short, are that we are all born with a hardwired set of concepts which are clear to us, that we don't need any explanations of these concepts, and that once we settle on them, we can (potentially at least) explain everything in terms of them. Unfortunately, Leibniz died before he was able to identify those concepts which are clear in themselves. In any case, not very much was known about languages at that time—there was no empirical linguistics, no study of languages of the world. The program was revived again in the twentieth century on the basis of empirical linguistic studies (Bogusławski 1966, 1970; Goddard and Wierzbicka eds. 1994, 2002; Wierzbicka 1972, 1992, 2011, 2014). It came to light, through these empirical linguistic studies, that there are some words which crop up, apparently, in every human language. Why is that? Why should there a set of 65 or so words, which we can call universal words, which crop up in every human language? This finding of modern linguistics seems to be telling us something. Perhaps these concepts are part of our human equipment—mental equipment that we are born with.

Table 8.1 shows the set of words which seem to appear in all languages and which therefore are very likely part of our mental equipment as a species. They are given in 12 categories. These 65 words are like 'atoms' or 'elements' of meaning.

Any normal child, in any language, will understand these words. That means that when we want to explain a complex concept or thought—including a scientific thought—these words should be our starting point. When you want to explain anything to anybody, you have to start with concepts that the person already understands.

I also want to draw your attention to a second table, Table 8.2. The words in Table 8.1 cannot be defined without vicious circles, but there are also some words which *can* be defined that appear to be shared by all

Table 8.1 Universal words with indefinable meanings (semantic primes)

1.	I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY, KIND, PART
2.	THIS, THE SAME, OTHER
3.	ONE, TWO, MUCH~MANY, LITTLE~FEW, SOME, ALL
4.	GOOD, BAD, BIG, SMALL
5.	THINK, KNOW, WANT, DON'T WANT, FEEL, SEE, HEAR
6.	SAY, WORDS, TRUE
7.	DO, HAPPEN, MOVE
8.	BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING), (IS) MINE
9.	LIVE, DIE
10.	WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT
11.	WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH
12.	NOT, MAYBE, CAN, BECAUSE, IF, VERY, MORE, LIKE

Table 8.2 Selection of universal words other than primes

hands, mouth, eyes, head, ears, nose, face, legs, teeth, fingers, breasts, skin, bones, blood
be born, children, men, women, mother, father, wife, husband
long, round, flat, hard, sharp, heavy
fire, water
be on something, at the top, at the bottom, in front, around
sky, Earth, ground, Sun, stars, Moon, during the day, at night
creature, grow (in ground)
be called
hold, laugh, sing, play, kill

or most languages (Goddard 2010, 2012, 2016; Goddard and Wierzbicka 2014). For example: 'hands', 'mouth', 'eyes', 'head', 'blood'—all languages appear to have words for those. Also 'children', 'men', 'women', 'be born', 'father', 'mother', 'husband', 'wife', 'fire', 'water', 'sky', 'Earth', 'ground', 'creature', 'to grow in the ground'; and a few verbs like 'to hold', 'to laugh', 'to sing', 'to play', 'to kill'. The most likely explanation for the apparent universality of these complex words is that they result from common human experience (see Chap. 3 for more detail).[1]

You will see that the word 'creature' is included in Table 8.2. 'Living creature' is possibly a better expression in English, because 'creature' has at least two different meanings in English, but if I say 'living creature' you know what I am talking about. A dog is a 'living creature'. A spider is a 'living creature', and so on. The ordinary word 'creature' corresponds pretty closely to the way scientists use the word 'animal'.[2]

Here is our definition of 'creature', tentative and of course open to discussion:

(living) creature
something living
something like this can move
something like this can feel something

All the words in the definition are semantic primes, that is, concepts which are assumed to be elementary—concepts that you can't break down into parts. The definition shows that 'creature' is not one of those, because it can be broken down. It is a fairly simple concept but not elementary: 'something living', 'something that can move', 'something that can feel something'. By the way, we call these definitions 'explications'—they are a kind of definition but not the normal, conventional type of definition.

Before, I said that semantic primes, the words in Table 8.1, which cannot be explained or defined, are like atoms (or elements) of meaning. The words in Table 8.2 are like molecules (or compounds) of meaning; in fact, we call them 'semantic molecules'. They can be broken down, like 'creature' here, but they function in ordinary communication as convenient chunks of meaning. In the reduced version of English which we call

'Minimal English', two types of semantic molecules are used: universal ones, like 'hands', 'bones', 'mother', 'father', 'fire', and 'water', and language-specific ones, such as, for English, 'brother' and 'sister', 'animal', 'river', 'sea', 'read', 'write', and 'book'. (Many of the non-universal molecules are shared by many languages and geographical and cultural areas.) As we will see, in the teaching of astronomy, which is the main theme of this chapter, we can rely almost exclusively on universal molecules.

8.2 Teaching Children About the Universe: The Conventional Approach

In a children's pop-up book *The Solar System* (The Five Mile Press 2010:1), the notion of 'the Solar System' is introduced as follows: 'If we think of planet Earth as our home in space, then the Solar System is our neighbourhood. The Solar System (…) contains a sun, eight planets (including Earth), more than 166 moons and millions of comets, asteroids and meteoroids'.

So 'Solar System' is defined here with a reference to 'the Sun'. 'The Sun', however, is defined with reference to the 'Solar System': 'The Sun is a fiery ball of gas at the centre of the Solar System' (p. 3). These definitions are obviously circular, and neither of them refers to the reader's experience: after all, for the reader, the Sun is, first of all, something they often see in the sky. Furthermore, concepts like 'planet', 'Moon', 'comet', 'asteroid', and 'meteoroid' are introduced without any definitions at all. The mention of '166 moons' is likely to be particularly baffling to the reader, since there is no mention of the two meanings of the word 'Moon': first (roughly), 'something unlike anything else that people can often see in the sky at night', and second, 'anything that always turns around a planet'.

This approach is very common in popular science books for children, where the guiding principles seem to be these: first, don't explain any concepts in terms of words and meanings that the child already knows; second, don't try to relate scientific knowledge to children's own experience; and third, hit the children with familiar words used in unfamiliar and baffling senses, without any explanation.

I will adduce another example of this approach from a book entitled *My First Question and Answer Book* (Miles Kelly Publishing 2007). Here, the concept of 'the Sun' is introduced in answer to the question: 'Which star keeps us warm?' (p. 10). The answer provided says: 'The Sun does. It is a star like all other stars in the night sky, but it is much closer to Earth'.

What is a 'star', then, a child might well ask, given the baffling information that 'the Sun' is 'a star': obviously, for the child, 'the Sun' is not a star, because people don't see it in the night sky and because it is not one visible object among many. There is no question like 'What is a star?' in the book. Instead, we get the following, far more advanced, question: 'How are stars made?' The answer provided is that 'Stars are made from huge clouds of dust and gas' (p. 26).

In an article on science education, two American astronomers, Adams and Slater (2000: 42), state that 'students can easily accept that our Sun is hot but not that our Sun is a star because the "Sun as a star" concept is too far removed from direct experience'. Arguably, however, the reason is quite different: the students reject the concept of 'the Sun as a star' because it contradicts their meaning of the word 'star'. Until the two meanings of the word 'star', the colloquial and the scientific, are clearly explained, the confusion is likely to persist.

Similarly, in their article 'The astronomy and space science concept inventory', published in the American Astronomical Society's *Astronomy Education Review* (Sadler et al. 2010: 15), the authors speak of 'major misconceptions persisting at the end of a middle school Earth Science course'. At this level, they write, 'students exhibit many misconceptions concerning the Sun and solar system. The Sun is seen as an exceptional, unique object, not a star like others in the universe'. But surely, from a human point of view, the Sun, which gives people on Earth light and warmth, is indeed an exceptional, unique object, not a star like others in the universe. Evidently, the 'Astronomy and space science concept inventory' fails to include a concept which from 'ordinary people's' point of view is extremely important: the Sun in the ordinary, colloquial sense of the word. Instead of introducing a new, scientific concept, built on children's existing knowledge and conceptual framework, the authors dismiss that framework as a major misconception.

Since the present chapter will be focussed, above all, on the history of astronomy, I will also include here a quote showing how this topic is introduced in yet another children's book, *Deep Space* (Govert Schilling and Black Dog Publishers 2014). In this book, the chapter entitled 'The history of astronomy' (p. 23) starts as follows:

> Astronomy is as old as humanity itself. Tens of thousands of years ago, our distant forebears must have gazed in wonder at the glittering night sky and the regular cycle of day and night, summer and winter. The cosmos (*cosmos* is the Greek word for "order") was a place of imperishable, divine perfection. (…)
>
> The great pioneer of the Greek worldview was Claudius Ptolemy, who set out his ideas in [a work entitled] the Almagest. According to Ptolemy, Earth sat motionless at the center of the Universe, and the Sun, the Moon, and the planets circled around it in complicated orbits.
>
> It was not until the mid-sixteenth century that Polish astronomer Nicholas Copernicus came up with an alternative view of the Universe, with the Sun (helios) at the center. According to Copernicus, Earth is just one of the planets orbiting the Sun.

Not surprisingly (after what we have already seen), the word 'astronomy' is not explained, and neither are the other key words: 'the Sun', 'the Moon', 'planets', 'an orbit', 'to circle', and 'to orbit'.

The principles on which the present chapter is based are the opposite of those which we have seen evidenced in the examples above. They are: first, explain any concepts that are mentioned in terms of words and meanings that the child already knows; second, introduce scientific knowledge in relation to the children's own experience; and third, use familiar words in their familiar senses first, introducing the unfamiliar meanings through familiar ones.

In addition to these three basic principles, which contradict the established practice, there is another fundamental principle at play here, which is normally never considered in popular books on science, whether intended for children or for adults: the principle of cross-translatability into languages other than English. The point is that words like 'an orbit', 'to orbit', and 'to circle' don't have their equivalents in most languages of

the world, and neither do nouns like 'star', 'Sun', or 'Moon' in the scientific senses of these words (according to which the Sun is a star and there are a great many moons in the universe).

Even aside from the problems mentioned, science could not be introduced at school in most countries of the world along the lines envisaged in the books quoted here because the languages spoken in those countries would not have appropriate words. Furthermore, if it is envisaged that in many countries astronomy will be taught through English, in order to be effective, this teaching still needs to connect with the concepts that the children think with to begin with. Of course scientific English concepts could be introduced through words that are locally available, such as 'the middle' instead of 'the centre', or 'to turn around' instead of 'orbit' or 'circuit', but for this, too, the whole approach to teaching science through English, and languages comparable to English, would have to change first. The aim of this chapter is to show how this can be done.

8.3 Talking About the Universe Using Minimal English

Now I would like to illustrate what can be done with this kind of approach when you want to communicate about science. Imagine that you are going, as a friend of mine actually did, to a remote village. My friend spent many years in Papua New Guinea (PNG), where she learned one of the local languages, Koromu. The question was how to teach science to Koromu kids, how to teach maths, how to teach biology, how to teach basic astronomy, without relying on complicated English words that they were very unlikely to know.

I put it to you that we can teach science anywhere in the world, in Australia but also in PNG, by starting from scratch, that is, by starting with the concepts for which every language has words: the 65 semantic primes and the 50 or 60 universal semantic molecules.

To test this idea, we have so far developed two 'popular science' accounts using exclusively the simple and universal human concepts. One is about how to talk about the theory of evolution (it is included as

an appendix to Chap. 9). The other one, which I want to take you through here, is an attempt to talk about astronomy and the history of astronomy. I want you to imagine that you are talking, for example, to children in the Third World, somewhere in a place like Papua New Guinea.

How do you communicate science to them, or to young children in Australia, for that matter? In the rest of this chapter, I want to present a story about our changing ideas about the universe.

To begin with, we need some words such as 'the sky' and 'the Earth', 'night' and 'day', and 'Sun', 'Moon', and 'stars'. Not the scientific concepts, but ordinary everyday concepts. You will see that these words are included in Table 8.2 as likely universal semantic molecules. I'm going to show you explications for these words. It's interesting to see how they are build up, starting from very simple ideas, then getting more and more complicated.

the sky
a very big place, it is above all the places where people live
in all places where people live, people can see this very big place
they can see it far above the places where they live

the earth
a very big place
it is below the sky
all places where people live are parts of this place

According to these explications, the idea of the 'sky' is made up only of semantic primes (like 'place', 'above', 'people', 'live', and 'see'), while the concept of 'the Earth' already includes and partly depends on the concept of 'sky'. The two concepts 'go together', in a natural way, but actually 'sky' is the simpler one. Just to remind you, we are talking about very ordinary concepts here—concepts that everyone gets as very young children, not the scientific concepts that only come much later. The concepts of 'day' and 'night' (as in daytime, i.e. 'during the day' and night-time, i.e. 'at night') also go together, and both of them also include the idea of the 'sky'.[3]

Now what about 'the Sun' and the 'stars'? Well, as science students you might think that 'the Sun' is a kind of star, somewhere very far in the

universe. But that's a scientific understanding—that's not the starting point in everyday language. The starting point is that 'the Sun' is something we see in the sky during the day. Likewise, the stars are—to begin with—those many very small things we can see in the sky at night.[4]

sun
something
many people in many places can often see it in the sky during the day
when people see it, they can think like this: "it is something round"
people in a place can sometimes see it above this place for some time, sometimes they can feel something good in their bodies because of it
at some times during the day, people can see it in some places on one side of the sky
at other times during the day, they can see it in some places on the other side of the sky

stars
things of one kind
people can often see these things in the sky during the night, often they can see many many of them
they are very very small
people can often see them at times when they can't see anything else
people can't see these things in the sky during the day

Note that the explication of 'stars' includes the combination 'very very (small)', and also 'many many'. These appear to be acceptable ways of speaking in all or most languages, and, as we will see in a moment, they are actually very important to capturing a lot of key ideas about the 'universe', for example, that stars are 'very very big' and that they are 'very very far'.[5]

There's also the idea of the Moon, actually. It is another universal semantic molecule, that is, a taken-for-granted concept in all languages, as far as we know. I'm not presenting an explication for it here because it is a bit more complicated (mainly because we have to include the idea that the Moon is more 'changeable' than the Sun and stars).

These are the naïve, ordinary concepts which can be our starting points for our story about astronomy.

8.4 Ways of Thinking About the Earth, Sun, Moon, and Stars

To begin with, we need to set the scene. It seems that, in all societies and cultures, people are particularly interested in the sky at night. They have stories about the stars and the Moon, which somehow link these things visible in the sky with what happens to people. Looking at the sky at night, people often seem to experience something that in English we can call 'awe', 'wonder', or something like that.

At all times, in all places, people often want to look at the sky at night. They want to look at the Moon, they want to look at the stars. When people see the sky at night, they often feel something because of it. They want to know some things about it, they want to think about it, they want to say some things about it to other people. They want to say something about the Moon, they want to say something about the stars.

When people see the stars in the sky at night, they often think about people. They want to know what will happen to people, they want to know why people live on Earth, they want to know how people can live.

We can summarize some differences between 'traditional' and 'scientific' ways of thinking about the Earth, Sun, Moon, and stars, in the following paragraphs, which are all written in Minimal English. They are not full scientific descriptions, of course, but they are ways of getting the main ideas across to people with zero knowledge of modern science. Each of the 'blocks' has two parts: the first part sets out how 'people' (in general) can think, and the second part says that 'people can know now that it is like this: ….' (with some description following). In other words, the second part is describing, in a 'naive' but easy-to-understand way, some modern scientific knowledge.

[HOW PEOPLE CAN THINK ABOUT THE EARTH]
People can think about the Earth like this:

'It is a very big place, people live in this place'.

At the same time, people can know now that it is like this:

The Earth is something very very big, it is something round. It is not touching anything else, it is not near anything else.

The 'new knowledge' is obviously a very different way to the traditional way of thinking about the Earth—not as a very big place where people live, but as something very very big, round, not touching anything else, not being near anything else. You can see that I don't want to use any words like 'planet' or 'space' at this point.

Now we come to the Sun. The assumption here is that our new idea about the Sun is linked with our new idea about the Earth.

[HOW PEOPLE CAN THINK ABOUT THE SUN]
People can think about the Sun like this:
'It is something in the sky. During the day people can often see it in the sky. It is always somewhere above the Earth'.
At the same time, people can now know that it is like this:
The Sun is something very very big, it is something round. It is not touching anything else, like the Earth is not touching anything else. It is not near anything else, like the Earth is not near anything else.

And then when we come to the Moon, I think there's plenty of evidence that the Moon is conceptualized in relation to the Sun, that it is like a small Sun. This is a very incomplete description of knowledge about the Moon, of course, because it does not include (yet) the idea that the Moon moves around the Earth. We have not reached the stage of thinking about anything moving around anything else yet. That comes later.

[HOW PEOPLE CAN THINK ABOUT THE MOON]
People can think about the Moon like this:
'It is something in the sky. It is far from the Earth. At night people can often see it in the sky, as they can often see the sun in the sky during the day. It is always somewhere above the Earth'.
At the same time, people can now know that it is like this:
The Moon is something very big, it is something round. It is not touching anything else, like the Sun is not touching anything else. It is not near anything else, like the Sun not near anything else.

And now to the stars.

[HOW PEOPLE CAN THINK ABOUT THE STARS]
People can think about the stars like this:
'They are very small things in the sky. People can often see these things in the sky at night, far above the Earth. They are always far above the Earth'.
At the same time people can now know that it is like this:

The stars are very very big things, these things are very very far from the Earth. They are not touching anything else, like the Sun is not touching anything else. None of them is near another one. None of them is near anything else, like the Sun is not near anything else.

At this point, things start to get a bit more complicated. Traditional people all know that the stars appear to be in different places in the sky at different times of the night (and in different times of year). They also know that there are a few special stars (in the ordinary sense of the word) which are not like the others, because they appear to move around in relation to the other stars. This is actually a very striking observation for people anywhere who spend a lot of time looking at the sky. The first part of the block below is much longer than what we've seen before, because it is trying to capture these traditional ideas and ways of thinking about the stars. We will take it further in the block after this, which is about 'What is moving, what is not moving'.[6]

[SOME STARS ARE NOT LIKE ALL THE OTHERS]
If people often look at the stars, they can think about them like this:
'No star is always in the same place in the sky during the night'.
At the same time, it is like this:
Many stars are always near some other stars. If they are near some other stars on one night, they are near these stars on all nights. Some stars are not like this. If one of these stars is near some other stars on many nights, it can be far from these stars on many other nights after this. There are very few stars like this.
People can call these stars: 'planets'.
At the same time people can now know that it is like this:
Many stars are very very far from the Earth. The "planets" are not very very far from the Earth. At the same time, they are not very very far from the Sun.

I said before that I would be telling a story about the development of astronomy, about changing ideas about the universe, and how modern scientific ways of thinking came about. It's a story that is a basic part of science education, and it hinges around at least three key figures: Ptolemy, Copernicus, and Galileo. In Western schools, most students who are interested in science absorb this story over their time in primary and early secondary school, even if it is not taught explicitly. What I want to argue

is that it can be taught explicitly and, moreover, that it can be done using simple words and expressions that are found in all languages (i.e. semantic primes and molecules). I will show you how in the next section.

First, however, we need to do one more very important piece of scene-setting. We need to set out the traditional way of thinking about things moving in the sky. We have to get across the idea that certain people wanted to know more about it and did many things because of it, and that one of them was Ptolemy.

[WHAT IS MOVING, WHAT IS NOT MOVING]
For a long time, many people thought like this:

> 'The Moon is not always in the same place in the sky because the Moon moves in the sky. The Sun is not always in the same place in the sky because the Sun moves in the sky. The stars are not always in the same places in the sky because the stars move in the sky. The Earth doesn't move.'

Some people wanted to know more about it; they did many things because of this. One of these people was called Ptolemy. [He was Greek, he lived in the second century.]

A brief story of Ptolemy and how he understood the Universe is given in the Appendix to this chapter. We don't have space to go over it here. If you read it, you'll see that it tries to 'get inside the head', so to speak, of this ancient observer of the heavens. He was very dedicated to watching the night sky and trying to understand what it all meant, but from a very different point of view to modern scientists. The passage in the Appendix also summarizes Ptolemy's conclusions, which were very detailed. One of his main ideas was that the Earth was the centre of the universe, so to speak, and that the stars, Sun, and Moon all revolved around the Earth.

To jump to the next part of the story, and to the next key figure—Copernicus—we need the following:[7]

Many people don't think like this anymore because they know more about the stars now.
They know more now because at some times before it was like this:

> Some people wanted to know more about the stars. They wanted to know well why at some times people could see some stars in the sky in some places, not in some other places. They often looked at the sky at night

because of this. They thought about it for a long time, they wanted to think about it well. They did many other things because of this. One of these people was called Copernicus. [He was Polish, he lived in the sixteenth century.]

8.5 The Story of Copernicus

[HOW COPERNICUS THOUGHT ABOUT THE STARS]
Copernicus wanted to know many things about the stars, he wanted to know these things well. Because of this, often when he looked at the stars, he thought about them for a long time. He thought about them not like many people thought about the stars before. At the same time, he thought about the Earth, he thought about it not like many people thought about the Earth before.

So how did Copernicus think about 'the Earth'?

[HOW COPERNICUS THOUGHT ABOUT THE EARTH]
Copernicus thought about the Earth like this:

'It is not like Ptolemy said. The Earth is not always in one place, the Earth moves. It moves like something can move when it is turning around something else for some time if it is like this: it is never near this other thing during this time, it is never far from this other thing during that time. The Earth is turning like this around the Sun all the time. The Sun is always in the same place, it doesn't move. The Earth turns like this around the Sun once in one year'.

[HOW COPERNICUS THOUGHT ABOUT THE EARTH AT THE SAME TIME]
At the same time Copernicus thought about the Earth like this:

'The Earth moves in another way at the same time. It moves like something round can move if it is like this: it is turning around in one place for some time, it is not turning around anything else.
The Earth is turning around like this all the time. It turns around like this once in one day'.[8]

I will return briefly to the concepts of 'one year' and 'one day' in Sect. 8.8. At this point, I want to say two more things about Copernicus,

and then I'd like to introduce you to Galileo and his telescope, because that's the start of the scientific method and how it all developed. But first, more about Copernicus:

[HOW COPERNICUS THOUGHT ABOUT THE SUN]
When Copernicus thought like this about the Earth, he thought at the same time about the Sun. He thought like this: 'The Sun doesn't turn around the Earth, the Earth turns around the Sun. The "planets" do not turn around the Earth, they turn around the Sun. All the "planets" turn around the Sun in the same way. The Earth is one of the "planets"'.

[HOW COPERNICUS THOUGHT ABOUT IT ALL]
When Copernicus thought about it all like this, he thought very good things about it all. When he thought like this, he felt something very good because of this. He wanted to say something about it to other people. He thought like this at that time: 'When people see the sky at night, they can think about God because of this. If people know how it all is, they can think something very very good about God because of this'.

You can see that this was how Copernicus thought about it, if you read the introduction to his *De revolutionibus orbium coelestium* (Copernicus 1976[1543]). However, for most of his life, he kept silent.

[WHAT COPERNICUS SAID TO OTHER PEOPLE AT SOME TIME]
For a long time Copernicus didn't say anything about all this to many other people. He knew that if he said it, many people would say: 'this can't be true'. He knew that if he said it, many people would say very bad things about him because of this. At the same time, he wanted other people to know it.

Because of this, a short time before he died, he said something like this to someone: 'I want many people to know it, I want you to do some things because of this'. After this, this someone did some things, like Copernicus wanted. Because of this, after this many people could know what Copernicus said.

This was the great drama of Copernicus. He was terrified of saying these things out of fear of what could happen to him, and, at the same time, he had a great desire to let other people know how it is. Eventually, after his death, his findings became widely known, but, as he had expected, they were mostly disbelieved.

[WHAT OTHER PEOPLE THOUGHT ABOUT THIS]
When other people knew that Copernicus said this, many people thought: 'This can't be true'. For a long time, many people thought like this. At the same time, a few people thought: 'Maybe this can be true'. There were very few people like this. These people thought about this for a long time, they did many things because of this. After this, they could know that it was true. One of these people was called Galileo. [He was Italian, he lived in the seventeenth century.]

8.6 The Story of Galileo

Perhaps the most remarkable thing about Galileo was his use of a newly invented instrument, the telescope. This led him to new observations and to a whole new way of thinking.

[WHAT GALILEO DID]
Galileo looked at the stars not like other people looked at them before. Because of this, he could see them well, not like people could see them before. When he was looking at them, he was holding something of one kind near his eyes. When someone holds something of this kind near the eyes, this someone can look at some places very far from the place where this someone is. This someone can see these places well. (Things of this kind are called 'a telescope'.) When Galileo looked at the sky at night like this, he could see some places very far from the Earth well.

[HOW GALILEO THOUGHT ABOUT IT]
Galileo thought about it like this at that time: 'No one before could see these places like I can see them now. Because of this, no one before could know some things about these places as I can know now. When other people know this about these places, they can think something very very good about them. At the same time, they can think something very very good about God'.

So for Galileo, like Copernicus before him, discovering these things by looking at the night sky led him to great admiration for God. Nonetheless, like Copernicus, Galileo knew that many people would not approve of what he had to say. The story continues.

[WHAT GALILEO COULD KNOW AT THAT TIME]
Because Galileo could see some places very far from the Earth well, he could know many things about these places well. He could know some things about the Moon well, he could know some things about the 'planets' well. At the same time, he could know some things about the Sun well. Because of this he could know well that it was like Copernicus said: the Sun does not turn around the Earth, the Earth turns around the Sun. He knew that it was true.

[WHY GALILEO WANTED TO SAY IT TO OTHER PEOPLE]
When Galileo knew well that it was true, he said it to some other people. He knew that some people thought like this at that time: 'If someone says this about the Earth, this someone says something very bad. People can know that God doesn't want people to say this about the Earth'. (That's against the Bible, many people thought at that time.) He knew that if he said: 'It is like Copernicus said, the Earth moves', something very bad could happen to him because of this. He knew that some people could do something very bad to him. Because of this, for a long time he didn't say it to many people. At the same time, he thought like this: 'The Earth moves, like Copernicus said, it turns around the Sun. I know that this is true, I want to say it because of this. I want to say it to many people, it will be good if I say it to many people'. Because he thought like this, at some time he said it to many people. He knew how some people thought about God at that time, he didn't want not to say it because of this.

What must be particularly striking about Galileo's story for students of science is Galileo's great desire to communicate science: He knew that conveying his discoveries to other people could be very dangerous for him personally, and guided by the normal human instinct of self-preservation, he was for a long time keeping his discoveries to himself. Yet the urge to share the truth about the universe—and about the wonders of the universe that he discovered with other people—was too great. As in the case of Copernicus, the awe before the world's intricate beauty, which his studies revealed to him, had for Galileo a religious dimension: the universe led his thought to God.[9]

[HOW GALILEO THOUGHT ABOUT GOD]
Galileo did not think about God like these other people thought about God. He thought about God like this: 'God wants people to know how people can live well on Earth. At the same time, God wants people to look at the stars. God

wants people to think about the stars, God wants people to think about the Sun, God wants people to think about the Moon. If people think well about all these things, they can know much about them. When people know much about these things, they can't not think about God'.

In the last section, I try to look at all those things from the point of view of scientists living today.

8.7 Science Today: What People Can Know Now

Between the sixteenth and seventeenth centuries, when people like Copernicus and Galileo (and also Kepler and Newton) studied the sky and thought about the Earth and our own times, great cultural changes took place in Europe, which affected astronomy and the study of the universe in general. This is not the place to try to summarize these changes or their consequences, not even very briefly. Thus, in this section I am not going to aim at producing anything like the full picture, or even a balanced sketch of the changes. Instead, I am going to be selective and say something about only two aspects which I see as significant and interesting. No doubt somebody else could focus on other aspects and take the story in this last section in a different direction.

The first aspect has to do with the enormous expansion of scientific knowledge and the apparent constant thirst for even more knowledge. Building on the work of scientists like Copernicus and Galileo, and also on powerful new instruments and technologies, scientists gradually came to know more and more about the universe—incomparably more than those on whose shoulders they were standing. At the same time, the more scientists knew, the more they wanted to know. This can be summarized in the following Minimal English text:

[WHAT PEOPLE CAN KNOW NOW ABOUT THE STARS, THE SUN AND THE EARTH]
People can know now that the Sun does not turn around the Earth, they can know that the Earth turns around the Sun. They can know that the 'planets' turn around the Sun, they can know that the Earth is one of the 'planets'.

People can know a lot about the 'planets' now, they can know a lot about the stars now. They can know a lot about many other things like the stars. They can know a lot about many places far far from the Earth, far far from the Sun, far far from the stars.

They can know these things because for a long time before it was like this: People like Copernicus thought about the stars for a long time, people like Galileo thought about the stars because of this. These people very much wanted to know many things about the stars, they did many things because of this.

While the expansion of knowledge continued, science acquired immense prestige and authority in the Western world, and many scientists developed great confidence in what science could offer. In fact, many scientists started to speak as if, thanks to science, people could soon know all there was to know about the universe. Arguably, a good example of this attitude today is the world's most famous living scientist Stephen Hawking and his (co-authored) book *The Grand Design* (2010). Other distinguished scientists, however, take a different attitude and point out that behind every new discovery, there is a new mystery. One good example here is the Nobel Laureate Sir Peter Medawar, author of a book entitled *The Limits of Science* (1984), who in a book entitled *Advice to a Young Scientist* (1979: 31) wrote: 'There is no quicker way for a scientist to bring discredit upon himself and upon his profession than roundly to declare—particularly when no declaration of any kind is called for—that science knows, or soon will know the answers to all questions worth asking'.

The second, related, aspect has to do with the relationship between knowledge and understanding: while most scientists today have no doubt about the enormous increase in knowledge about the universe, not everyone is convinced that there has been a corresponding increase in understanding. As Albert Einstein (1952) said in his Preface to Galileo's 'Dialogue Concerning the Two Chief World Systems, Ptolemaic & Copernican': 'Galileo's efforts were aimed not so much at "knowledge" (in Einstein's German, *Wissen*) as at the "understanding (*Begreifen*)"'. Many scientists today appear to think that understanding of the universe is still eluding them. For example, Richard

Feynman, a Nobel Laureate in physics, in his book *The Meaning of It All* (2007: 23) writes:

> The fact that there are rules at all to be checked is a kind of miracle; that it is possible to find a rule, like the inverse square law of gravitation, is some sort of miracle. *It is not understood at all*, but it leads to the possibility of prediction—that means it tells you what you would expect to happen in an experiment you have not yet done. (emphasis added)

For some scientists, including astronomers, this raises again questions about God. For the great pioneers of science such as Copernicus, Galileo, Kepler, and Newton, knowledge about the universe was linked with the understanding, and understanding was linked with God: they were convinced that the laws of nature were the work of God. In modern times, prevailing attitudes changed and many people came to think that there was a clash between science and religion, that belief in God was hindering the progress of science, and that science was somehow defeating religion. As mathematician and philosopher James Franklin (2014) puts it, 'From the 1850s to the 1950s, science was on a roll and seemed to atheists to be on the verge of finishing off religious belief'. Stephen Hawking's *The Grand Design* can be seen as continuing this line of thinking.

On the other hand, other distinguished scientists take a different view. For example, Allan Sandage, who is often described as one of the greatest and most influential astronomers of the twentieth century, the winner of the Crafoord Prize, writes: 'There has to be some organizing principle. God to me is a mystery but is the explanation for the miracle of existence—why there is something rather than nothing' (1991, quoted in Lennox 2011:44).

Surprisingly perhaps, the atheist astronomer Fred Hoyle, the author of the term 'Big Bang', strikes a somewhat similar note. According to American author, speaker, and radio host Eric Metaxas (2014), faced with the latest discoveries Hoyle 'said that his atheism was "greatly shaken" at these developments'. Metaxas (2014) further quotes Hoyle as saying this: 'a common-sense interpretation of the facts suggests that a super-intellect has monkeyed with the physics, as well as with chemistry and biology… The numbers one calculates from the facts seem to me so

overwhelming as to put the conclusion almost beyond question'. (The phrase 'latest discoveries' refers here to the so-called fine-tuning necessary for life to have developed in the universe and indeed for the universe to exist at all. As James Franklin (2014) puts it, quoting another illustrious contemporary scientist, 'The universe is very finely tuned for life—almost as if, Freeman Dyson said, it "must in some sense have known that we were coming"'.)

In adducing these quotes, I do not mean to suggest that today working scientists often talk about God in their scientific publications. In fact, the prevailing view appears to be that questions about God should be kept apart from questions about the universe and that in scientific discourse, the realms of science and religion should be kept well and truly separate. At the same time, according to many philosophers of science, 'the old days of triumphalist scientism are over' (Franklin 2014; cf. also Aczel 2014; Flew 2007; Dworkin 2013; Nagel 2012; Collins 2006). While the concept of 'God' does not figure in recent writings on the universe in the same way as it did in the works of Copernicus or Galileo, it again plays a significant role in the thinking of many contemporary scientists and philosophers, both believers and non-believers.

As the Oxford mathematician and philosopher of science John Lennox says in the Introduction to his book *God and Stephen Hawking* (2011: 11): 'God is very much on the agenda these days. Scientists have made sure of it by publishing book after book, with titles like Francis Collins' *The Language of God*, Richard Dawkins' *The God Delusion*, Victor Stenger's *God: The Failed Hypothesis*, Robert Winston's *The Story of God*, and so on, and so on'. As Lennox notes: 'some of these books have been runaway bestsellers', and while some are written by atheists, others are authored by scientists who believe in God and see his fingerprints in the universe.

As we saw, several hundred years ago, contemplation of the night sky directed the thinking of astronomers like Copernicus and Galileo to God (and before that, led Ptolemy's thoughts to Zeus). Today, contemplation of the universe—about which more and more is known, and yet more and more reveals itself as unknown—still often leads scholars to wonder and awe, and even to the thought that the universe is, ultimately, a mystery and our existence on Earth, an unfathomable miracle.

[HOW PEOPLE CAN THINK ABOUT IT ALL NOW]
Many people think like this now:
People know many many things about the stars now, they know many many things about other things like that now. Because of this, they can say about many things now: 'It is like this, we know it.' At the same time, people can't say about many of these things now: 'We know well why it is like this.' Often, when people think like this, they feel something because of this.

8.8 Remaining Issues and Final Comments

According to a paper by two American astronomers Adams and Slater, entitled 'Astronomy in the National Science Education Standards' and published in the *American Journal of Geoscience Education* (Adams and Slater 2000), the first objective for grades K-4 (kindergarten to grade four) reads: 'Sky objects have properties, locations, and movements that can be observed and described'. I submit that this is not as easy for the children to understand as professional astronomers might think. To begin with, the expression 'sky objects' can be baffling to children, and words like 'properties' and 'locations' do not belong in most children's active vocabulary either. As a more child-friendly alternative, I would propose this: 'People can know where stars are, how they move and what they are like. People can know the same about other things in the sky. People can say these things with words and numbers'.

I am not suggesting that technical concepts should not be introduced in the teaching of astronomy in schools, but rather, that it would be better to start with words and meanings that children are familiar with. To say this is not to suggest that the teaching of astronomy needs to be preceded by large-scale investigations into children's acquisition of words and meanings. Without any such investigations, we know enough about human languages now to be able to say that universal words like 'move', 'place', and 'like' (in uses such as 'like this') are more likely to be known to children than 'movements', 'locations', and 'properties', and not only in English-speaking countries but anywhere in the world.

In an article entitled 'Astronomy's Conceptual Hierarchy', Philip Sadler, a scholar at the Harvard-Smithsonian Center for Astrophysics and

a leader in the field of astronomy education, asks: 'Why are the fundamental concepts of astronomy so difficult to our students?' (Sadler 1996: 1). He rightly points out that there is a hierarchy of concepts in astronomy, that 'concepts that are required for understanding more difficult ideas should be taught first' (p. 54), and that 'certain elementary knowledge appears prerequisite for more difficult concepts' (p. 55). He also points out that 'teachers rarely can recall their prior, non-scientific conceptual frameworks and tend to teach without attending to their students' prior knowledge'.

These are important points. It needs to be emphasized, however, that to recall their prior, non-scientific conceptual frameworks, teachers need to bring to mind ordinary, non-scientific words and meanings. A good example is provided by words like 'revolution', 'revolving', 'rotation', 'orbiting', and 'axis', which are often used in the teaching of astronomy in American schools.

Sadler (1996: 55) states that 'the understanding of day and night and the yearly revolution about the sun appears to be the key to mastery of the sun's rotation in the sky (…) and many other concepts (…). It may be impossible for students to acquire powerful scientific ideas without great attention to the basics'.

What *are* the basics, then, as far as day and night are concerned? The accepted 'standard' in the American educational system (endorsed by Sadler as 'correct') appears to be the following question-and-answer pair: 'Q. What causes night and day? A. The earth spins on its axis'. But what is an 'axis', and what does it mean for an object to 'spin on its axis'? As far as I can see, these two questions are never addressed in the relevant literature. Furthermore, if the understanding of what causes night and day really depended on the understanding of the concept of 'axis', it would not be accessible to children in most countries of the world, because most languages don't have a word like 'axis'.

As we have seen in the section on Copernicus, however, the basics in this area do not require references to an 'axis' and to the Earth 'spinning on its axis'. Rather, what is required is, above all, what was said in Sect. 8.5 in the segment entitled 'How Copernicus thought about the Earth at the same time':

[THE EARTH MOVES LIKE SOMETHING ROUND CAN MOVE IN ONE PLACE]
The Earth moves like something round can move if it is like this:
It is turning around in one place for some time, it is not turning around anything else.
The Earth is turning like this all the time. It turns like this once in one day.

It should be noted, however, that regardless of the word 'axis', incomprehensible to most children, the statement 'The Earth spins on its axis' does not explain what causes day and night. To try to provide such an explanation, we would need to follow the segment 'The Earth moves like something round can move in one place' with some additional lines like the following ones:

[DAY AND NIGHT]
Because the Earth moves like this, it is always like this in all places on Earth:
When some places are for some time on the side of the Earth where the Sun is, people in these places can see things well in these places because of this. People in these places can then say: "It is day now."
After this, for some time people in these places can't see things well in these places anymore, because these places are not anymore on the side of the Earth where the Sun is. People in these places can then say: "It is night now."

The word 'day' used in the segment above refers to a certain time ('when'). It should be noted, however, that this word has also a second meaning, building on the first one and referring to duration ('how long'), as in the phrase 'one day'.

To conclude, in this chapter I have presented a new way of communicating science, especially of transmitting knowledge about the world to children. I have illustrated this approach with the story of the Western engagement with the universe from Ptolemy, through Copernicus and Galileo, to the present day. Above all, I have sought to demonstrate how the use of Minimal English can allow us to talk about science, including the history of science, in a way that is simple, clear, and, in principle, accessible to any human group anywhere in the globalizing world.

Taught through Minimal English, that is, through an easy-to-learn globally accessible medium, science can aim at a stable and truly universal

content, without being subject to conceptual pressures from Anglo English or from other European languages and cultures. Or so this chapter hopes to show.

When 150 years ago Lev Tolstoy was building his great educational library for elementary schools in Russia, he required that every word in these publications should be intelligible to children. Such is also the ambition of the text about the universe presented in this chapter. In this case, however, the text presented is intended to be intelligible not only to children in one country, speaking one language, but to children of any language, in any country. Naturally, the hope is that if this can be done for one area of knowledge, it can also be done for any other.

Appendix: The Universe from the Point of View of Ptolemy

[HOW PTOLEMY THOUGHT ABOUT THE SKY AT NIGHT]
Ptolemy lived a very long time ago. He often looked at the sky at night for a long time. When he was looking at it, he felt something very good because of it. He often thought about it for a long time. He thought about it like this:
'I live now, a short time after I will not live anymore. The stars are not like this, they will always be in the sky as they are now. I am here now, I can't know where I will be some time after this. The stars are not like this. If I know where a star is now, I can know where it will be some time after this. Here on Earth nothing is ever the same. The stars are not like this, they are always the same. On Earth, things move in many ways. It is not like this in the far away places where the stars are. In these places, everything moves always in the same way. Many bad things happen on Earth, it is not like this in the places where the stars are. It is good if people can know a lot about the stars. If people know a lot about the stars, they can know how they can live on Earth. If they know how they can live well.'

[HOW PTOLEMY THOUGHT ABOUT THE MOON, SUN, 'PLANETS', STARS, AND THE EARTH]
Ptolemy thought like this: 'The Earth is round. The Moon turns around the Earth. The Sun turns around the Earth. The "planets" turn around the Earth. All the other stars turn around the Earth. Everything turns around the Earth. The Earth is in the middle of everything, it is not turning around anything'.

[WHAT HAPPENED AFTER PTOLEMY SAID THIS TO OTHER PEOPLE]
Ptolemy said many things about it all to other people. After this, for a very long time many people thought like this: 'It is as Ptolemy said, it can't be not like this'. Many people thought like this because they knew that Ptolemy knew a lot about the stars. They knew that he knew a lot about the 'planets'. They knew that people could always see the 'planets' in the places in the sky as Ptolemy said.

Notes

1. Someone might argue that the words in Table 8.1 also come from shared human experience, but it is not clear how concepts like 'I' and 'you', or 'because', 'if', and 'can', for example, could come from experience—at least, not from 'external', observational experience.
2. In ordinary colloquial English, people wouldn't normally call a spider, or even a fish or a bird, an 'animal', but in scientific language, the word 'animal' has a more inclusive meaning, close to, or even identical to 'creature'. Also, ordinary language distinguishes between people and animals. For example, there are children's books with titles like 'People and Animals', but many scientists would prefer to say 'People and other animals'. It's good to remember that it wasn't always so, even in science. For instance, one of Charles Darwin's books had the title *The Expression of Emotion in Man and Animals.* So for Darwin, people were not animals; but since then in scientific language, this has moved in a different direction.
3. There isn't time here to justify all the details of these explications, or to discuss other possible ways of going about it, but if you are interested, you can follow up with Goddard (2016). One point about the meanings of semantic molecules is that they are so taken for granted in our everyday thinking that it is quite hard to 'take them apart'.
4. The words 'sometimes', 'often', and 'always' are used a lot in the Minimal English texts. They are short equivalents (linguists call them portmanteau expressions) to 'at some times', 'at many times', and 'all the time', respectively. In a similar fashion, the word 'it' is sometimes used for 'this something', and 'they' for 'these things' or, sometimes, for 'these people'.
5. It's interesting that scientists don't much like words like 'far', but prefer to use words like 'distance'. When I say 'very far', for example, scientists would always prefer to say 'at a considerable distance'. This is something which we have to resist at this stage. The word 'distance' already brings in

the idea of something 'measurable' and encourages us to think along those lines. In lots of languages people have no word for 'distance', but they do have an adverbial word for something being 'far' or 'very far'.

6. Notice that at the end of the first part, there is an extra line, not like anything we have seen before, that introduces a new word, namely, the word 'planets'. This line uses the semantic molecule 'called'. The basic idea is that all languages have a way of bringing in a new word, so to speak, to make it easier for people to be specific about what they want to talk about. Using the word 'planets', the second part of this block captures the new knowledge that recognizes that the planets are very different from all the other stars, because they are 'not very very far from the Earth' and 'not very very far from the Sun (at least, in comparison to most other 'stars').
7. 'Well' is not on the list of 65 semantic primes, but 'good' is and we can regard 'well' as a kind of contextual variant of 'good'. It can combine with a number of predicates. You can 'live well', you can 'know something well', you can, apparently, 'say something well' in any language. So if you feel that the meaning is different … in a sense, it is different, but that's because of the combination. If it's 'live', it gives a different kind of feel, and if it's combined with 'know', then there's a different feel as well. And someone can 'speak very well'—'say things well'—and so on, but 'well' is the same.
8. The statement 'The Earth turns like this once in one day' may seem circular, given that today popular books on astronomy sometimes define 'one day' as 'the amount of time it takes the Earth to spin around once'; but of course the concept of 'one day' is a pre-scientific one and does not depend on any knowledge about the rotation of the Earth. Similarly, the statement 'The Earth turns around the Sun once in one year' may seem circular, given that today popular astronomy books often define 'one year' as 'the amount of time it takes the Earth to turn once around the Sun'. In fact, of course, the concept of 'one year' is a pre-scientific one and does not depend on any knowledge about the Earth's revolutions around the Sun. Discussing how the concepts of 'one day' and 'one year' are built out of universal semantic primes would go beyond the scope of the present chapter. (See, however, Goddard, forthcoming.)
9. From a linguistic point of view, the last sentence of the section below deserves a comment: the double negative in the sentence 'when people know much about these things, they can't not think about God'. In general, double negatives are not universal, but it seems that 'can't not' is 'sayable' in all languages.

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9

Big History Meets Minimal English

David Christian

9.1 Introduction: Towards Shared Human Identities, Stories, and Languages

Both the projects discussed in this essay—Big History (Christian 2004a, b, 2006) and Minimal English—attempt to demonstrate the underlying unity of humanity as a whole, though they approach that task in very different ways. Generating a more powerful sense of human unity is increasingly important in a globalized world, whose many challenges and opportunities will have to be approached, not nation by nation but by humanity as a whole. Yet the world is divided by language, history, ethnicity, and politics into distinct, mutually uncomprehending, and sometimes warring, tribes. Modern systems of education only add to these divisions by focusing on their teaching of history, culture, and politics on the distinctive features of different nations.

One of the most powerful ways in which scholars and teachers can help overcome these divisions is by focusing on the underlying unity of

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humanity. Just as nation states have managed in recent centuries to generate a sense of commitment to the multimillion large "imagined communities" of the modern nation (cf. Anderson 1983), so, now, we need to demonstrate the reality, the significance, and the increasing salience of the much larger community of global humanity. Can we imagine the community of humanity as a whole? Can we help people identify with the human community, as well as with the smaller communities of modern nation states? It is surely possible. After all, the global human community has a cohesion that arises from shared genetic roots and a shared capacity for language, as well as on increasingly close global entanglement and, though it is less commonly recognized, on a shared history. That cohesion is being cemented by the growing number of shared challenges and opportunities faced by all humans in an increasingly globalized world.

Teaching about the underlying unity of humanity will be crucial if humanity is to achieve any consensus on the challenges that face humanity as a whole in the Anthropocene Epoch, the first epoch in planetary history in which a single species will determine the future of the biosphere for many centuries and millennia.[1] This is the spirit in which H.G. Wells attempted to write a Universal History, the *Outline of History*, in 1919, just after the horrors of World War I. His argument was that as long as schools continued to teach only the histories of nations, similar wars would recur, like a lesson we had failed to learn despite many repetitions. World peace, he argued, required the creation of:

> *common historical ideas*. Without such ideas to hold them together in harmonious co-operation, with nothing but narrow, selfish, and conflicting nationalist traditions, races and peoples are bound to drift towards conflict and destruction. This truth, which was apparent to that great philosopher Kant a century or more ago … is now plain to the man in the street. (Wells 1971[1921]: vi)

In the 1920s, the League of Nations argued for school history syllabi that downplayed nationalism, and the economic historian, Eileen Power, argued for an education in world citizenship based on the idea that "everyone is a member of two countries, his own and the world" (Tosh 2008: 125, citing Berg 1996: 223).

Since then, the power of weaponry has increased by orders of magnitude so that today, we have the ability, if we are foolish enough, to destroy most humans and much of the biosphere in just a few hours by releasing the 1800 nuclear weapons that remain on high alert.[2] We have come very close to this fate. After the Cuban Missile Crisis of 1962, President Kennedy admitted that he thought the odds of war lay "between one out of three and even" (Zelikow and Allison 1999: 271). Yet today, educational politics is still shaped overwhelmingly by nation states and is overwhelmingly *about* nation states, their histories, their cultures, their politics, and economics. Nationalist historical thought exacerbates the deep divisions already embedded within different linguistic and cultural traditions.

In the late 1980s, the great world historian, William McNeill, repeated Wells' plea for a more unified understanding of humanity and human history:

> Humanity entire possess a commonality which historians may hope to understand just as firmly as they can comprehend what unites any lesser group. Instead of enhancing conflicts, as parochial historiography inevitably does, an intelligible world history might be expected to diminish the lethality of group encounters by cultivating a sense of individual identification with the triumphs and tribulations of humanity as a whole. This, indeed, strikes me as the moral duty of the historical profession in our time. We need to develop an ecumenical history, with plenty of room for human diversity in all its complexity. (McNeill 1986: 7)

In 2000, at the 19th International Congress of Historical Sciences in Oslo, the archaeologist, Andrew Sherratt, repeated the challenge, inviting historians of all kinds to "provide a more comprehensive vision which can appeal to humankind in general, rather than simply to local segments of the world's population" (Sherratt 2000: 23).

This chapter discusses the distinct approaches of Minimal English and Big History to the challenge of trying to build a shared sense of human identity. The two projects take up two distinct aspects of that larger challenge. Minimal English tackles the linguistic challenge of communicating clearly despite the different assumptions and attitudes built into the very warp and weave of all languages, while Big History takes up the

historical challenge of identifying and teaching a shared human history, that can help build a sense of a shared human identity.

9.2 The Linguistic Challenge: Finding a Common Human Language

Anna Wierzbicka, Cliff Goddard, and their colleagues have explored the linguistic challenges arising from the fact that different languages seem to create different ways of perceiving and thinking about the world.

As they have shown, translation from one language to another is more than a technical challenge, because some concepts are so tightly imprisoned within particular languages that you need special skeleton keys to release them.

> Different languages reflect different ways of speaking and thinking. As many linguists studying endangered languages have often emphasized, every language contains, in its lexicon and grammar, a distinct conceptual universe that is going to disappear forever when the last remaining speakers of that language die out. (Wierzbicka 2014: 129)

Even the notion of "science" means something distinctive in English, where it applies primarily to the so-called exact sciences and not to disciplines such as history, unlike the German word, *Wissenschaft*, which applies to both the natural sciences and the Humanities disciplines.

Scholars such as Dipesh Chakrabarty (2000) have explored with great subtlety the dangers that these linguistic traps pose for the Humanities disciplines, in a world now dominated by academic English. The trouble is that English cannot convey many nuances that are important within other cultural traditions, yet its dominance makes it hard even to see what is now absent. How, asks Chakrabarty, can you tell the story of Bengali history in modern English?

> Faced with the task of analyzing developments or social practices in modern India, few if any Indian social scientists or social scientists of India would argue seriously with, say, the thirteenth-century logician Gangesa or

> with the grammarian and linguistic philosopher Bhartṛihari (fifth to sixth centuries) … Sad though it is, one result of European colonial rule in South Asia is that the intellectual traditions once unbroken and alive in Sanskrit or Persian or Arabic are now only matters of historical research … (Chakrabarty 2000: 5–6)

Historians writing today in India or China have to use concepts whose roots lie within European culture, because "the so-called European intellectual tradition is the only one alive in the social science departments of most, if not all, modern universities".

Yet the concepts embedded within English are now so powerful that they cannot be avoided. As Chakrabarty (2000: 5) writes: "Postcolonial scholarship is committed, almost by definition, to engaging the universals—such as the abstract figure of the human or that of Reason—that were forged in eighteenth-century Europe and that underlie the human sciences". Without these concepts, as he points out, it is impossible to engage seriously in modern political struggles.

> Concepts such as citizenship, the state, civil society, public sphere, human rights, equality before the law, the individual, distinctions between public and private, the idea of the subject, democracy, popular sovereignty, social justice, scientific rationality, and so on all bear the burden of European thought and history. One simply cannot think of political modernity without these and other related concepts that found a climactic form in the course of the European Enlightenment and the nineteenth century. (Chakrabarty 2000: 4)

These are serious problems for anyone interested in finding a language that can be shared by humanity as a whole. And perfect solutions may be beyond our reach, particularly if it is true that even words like "humanity" carry a lot of cultural baggage. Still, profound as these difficulties are, partial solutions are surely available. Indeed, the challenge of translating between languages, with greater or lesser precision and transparency, has been present throughout human history.

However, as Wierzbicka and Goddard have argued, translation is not the only way of trying to clarify communication across languages and

cultures. There is another alternative: seeking within each language those concepts and ideas that are common to all languages and presumably to all humans. Careful comparisons between languages show that in all languages there is a "core of simple words and concepts where all languages meet. … [R]elying on that shared human store of simple concepts (what Leibniz called the 'alphabet of human thoughts') one can articulate complex thoughts precisely and clearly" (Wierzbicka 2014: xi). Can we strip away all but this core language and find, within all modern languages, core concepts that are so clear and simple that they require no special effort of translation? Is this the language in which humans can talk to each other as humans, rather than as members of competing tribes?

That is the strategy of "Minimal English". It aims to use a simple core form of English to convey universal concepts without smuggling in the assumptions and presuppositions of Anglo English, the modern, globalized form of the English language.

Minimal English is based on the English version of a "Natural Semantic Metalanguage:" i.e. on a set of 60–70 core concepts ("semantic primes"), that seem to be present in all human languages. Scholars of natural semantic metalanguages have teased out these core concepts through sustained, systematic comparisons between many languages. As Anna Wierzbicka (2011: 383) put it in a recent article: "… 'inside' all languages we can find a small shared lexicon and a small shared grammar. Together, this panhuman lexicon and the panhuman grammar linked with it represent a mini-language, apparently shared by the whole of humankind". In principle, starting from this minimal set of concepts and minimal grammar, it should be possible to build descriptions of everything of significance. Semantic atoms (the core concepts) can be used to build semantic molecules, which can then be used to build increasingly elaborate concepts. So, can minimal languages free us from the semantic loadings specific to particular languages and cultures and help us conduct clear conversations about those ideas and values that are shared by all humans?

Many aspects of this project are discussed elsewhere in this volume. Here, I would like to discuss aspects that are particularly relevant to the project of Big History.

9.3 The Historical Challenge: Finding a Shared Human History

The emerging discipline of Big History takes up the challenge of teasing out and teaching a shared history of humanity (see Christian 2004a, b, 2010; Spier 2015). It does so by placing the history of humanity within what we can think of as a modern origin story. Like all origin stories, whether within oral traditions or the written traditions of the major world religions, origin stories count as foundational knowledge for all members of society. They can be taught at many different levels of sophistication. They summarize the best available knowledge within a given cultural tradition and synthesize from it the accounts of how everything came to be as it is and how humans and societies fit into the larger map of the universe as a whole. The story teased out within Big History is the first origin story generated by an interconnected humanity and the first to be based on modern, science-based research and scholarship.

As all nationalists know, the sense of a shared history is a powerful source of identity and social cohesion. So the absence of courses on human history in modern educational institutions throughout the world tells us how underdeveloped is our sense of belonging to a shared human community. Like traditional origin stories, the big history story attempts to explain the origins of all that is around us, so that we can map ourselves, as humans, onto the universe as a whole. But it tries to do so using the information generated within the increasingly global intellectual traditions of modern scientific scholarship.

To understand the goals and potential significance of big history today, it is necessary to see it as part of a series of larger shifts in modern knowledge, scholarship, and science.

Today, the idea of big history can seem strange, archaic, overambitious, perhaps totally impractical. Yet the curious thing is that until as recently as the late nineteenth century, the writing and teaching of origin stories or Universal Histories was regarded almost everywhere in the world as a central task for historians. Even Ranke, often regarded as the pioneer of modern, specialist, archive-based historical research, ended his days attempting to write a “Universal History”. True, in retrospect his

project, which was really about Europe, looks tribal rather than global, as do most origin stories when seen from outside. Nevertheless, Ranke took the project of writing Universal History very seriously.

> Universal history—he wrote—comprehends the past life of mankind, not in its particular relations and trends, but in its fullness and totality. The discipline of universal history differs from specialized research in that universal history, while investigating the particular never loses sight of the complete whole, on which it is working. (Ranke 1956: 62)

Ranke's project belonged to an ancient tradition. Origin stories can be found at the heart of most cultural and religious traditions, and at the heart of traditional systems of education. This is true of both societies with oral traditions and those with written traditions.

Origin stories that aim at a sort of universality can be found within all the great religious traditions. When seen from outside or in retrospect, it is easy to see the extent to which all traditional origin stories were embedded in regional or local cultural and religious traditions. Nevertheless, they seem to have been *experienced* as universal in their significance. The search for universal stories persisted even within the deistic traditions of early modern European science. Newton's science was universal in its claims and was based on the idea of a creator God as the "first cause" and foundation for all that existed. "… Is not infinite Space", he wrote, "the Sensorium of a Being, living, and intelligent, who sees the things themselves intimately, and thoroughly perceives them, and comprehends them wholly by their immediate presence to himself …"[3] The project of constructing universal accounts of the world and its origins persisted into the Enlightenment, and even into the nineteenth century, when it was taken up by many thinkers, from Hegel to Comte to von Humboldt. Alexander von Humboldt's multivolume work, "Cosmos", was the product of what he called the "Mad Frenzy … of representing in a single work the whole material world" (Wulf 2015: 235).

Then, quite suddenly, towards the end of the nineteenth century, confidence in the possibility of constructing a universal account of the past evaporated within the scholarly traditions of Europe. So, too, did the ancient tradition of constructing and teaching origin stories. Within a

century, these traditions had vanished from the major secular educational and research institutions of most countries in the world.

Why? I am not sure, and there has been surprisingly little research into the problem. This itself is symptomatic. Today, the assumption that good research and teaching are grounded in specialist disciplines, and come in separate fragments, is so deeply programmed into professional scholarship that it seems normal. Indeed, the pinhole perspective of most modern scholarship is often seen as a sign of intellectual maturity or professionalization. For almost a century, intellectuals around the world have accepted that a fragmented knowledge world is an intrinsic part of the modern condition. Such attitudes made it hard to see the disappearance of origin stories as a problem.

But many did regret the loss of confidence in traditional origin stories. Durkheim saw the resulting sense of rootlessness, of lost bearings, as dangerous, because it deprived people of a sense of place and meaning. He called this sense, "anomie". In the early twentieth century, when it was still possible to remember a more coherent intellectual universe, W.B. Yeats captured the sense of horror at modernity's dislocated knowledge world in *The Second Coming*. His poem was written just after World War I, when memories of what modern warfare could mean were still painfully alive. It offers a series of beautiful but terrifying images of lost coherence and its tragic consequences. "The falcon cannot hear the falconer; Things fall apart; the centre cannot hold …" Anarchy reigns, and a "blood-dimmed tide" is loosed on the world. For Yeats, the carnage of the trenches hinted at the horrors awaiting a world that has lost all sense of meaning.

9.4 A Modern Origin Story for Humanity

But perhaps this pervasive pessimism about the knowledge worlds of modernity, a pessimism that dominated scholarship and philosophy for much of the twentieth century, is overstated. Far from being the normal state of modernity, it may be that the modern sense of *anomie* is the state that all societies must endure when older origin stories lose authority, but new origin stories have not yet been constructed. This is a condition

familiar to many colonialized societies. But even the dominant societies of modernity lost confidence in their traditional origin stories as they encountered other origin stories and other religious traditions that were as richly constructed and as fervently believed as their own. Indeed, all modern societies have found themselves living in the intellectual equivalent of a building site.

Today, though, we can begin to see the foundations and frameworks of a modern, global origin story that is being built within modern scholarly traditions. That is the story that big history tries to tease out, to teach, and to disseminate.

The broad structures of an origin story for modern humanity began to emerge from the middle of the twentieth century. They appeared, first, in the natural sciences and then, eventually, within the Humanities. In the natural sciences, the emergence of more unified accounts of reality was driven partly by the appearance of new scientific paradigms. The most important were big bang cosmology, plate tectonics, and a biological synthesis combining Darwinian natural selection with a new understanding of genetics and biochemistry. So broad was the reach of these new paradigms that they encouraged many scientists, particularly in cosmology and physics, to take seriously the search for "Grand Unified Theories", theories that would unify many different domains of science.

It is striking that the new paradigms were all historical in nature, in contrast to the timeless universe of Newtonian science. Like many traditional origin stories, they described a universe that was evolving at all possible scales, from the cosmos as a whole, to planet earth, to life on earth, to human history. The discovery of radiometric dating techniques, beginning with C_{14} dating, in the 1950s, provided these stories with a robust and increasingly detailed chronological skeleton, linking all aspects of the past back to the origins of the universe itself, 13.82 billion years ago.

Unfortunately, most universities and research institutes have been so committed to the fragmented knowledge world of discipline-based research and teaching, that they have largely ignored this emerging story. A few prominent scientists have taken some interest in something like a modern origin story. Carl Sagan's 1980 series, *Cosmos*, was a first attempt to tell this story in English. E.O. Wilson's *Consilience* was a sustained

argument for unifying knowledge. And Stephen Hawking's 1988 best seller, *A Brief History of Time*, offered an aggressive defence of the search for grand unified theories. But most scientists continue to work and write within the borders of highly specialized scholarly disciplines.

The Humanities disciplines did not experience the unifying pressure of new paradigms, so scholars in the Humanities have generally shown even less interest in exploring an emerging origin story. Indeed, postmodernist scholars often glorified in the pinhole perspectives of modern knowledge. But since the 1980s, the notion of a modern origin story that links the Humanities and the natural sciences has begun to make modest headway even within the Humanities. It was welcomed, particularly within the rapidly growing American subdiscipline of "world history".[4] In 1998, the late William McNeill argued that historians should learn to see human history as one chapter in the larger histories emerging within the natural sciences:

> Human beings, it appears, do indeed belong in the universe and share its unstable, evolving character. … [W]hat happens among human beings and what happens among the stars looks to be part of a grand, evolving story featuring spontaneous emergence of complexity that generates new sorts of behavior at every level of organization from the minutest quarks and leptons to the galaxies, from long carbon chains to living organisms and the biosphere, and from the biosphere to the symbolic universes of meaning within which human beings live and labor, … (McNeill 1998: 12–13)

McNeill himself wrote world histories that explored the interrelationship between humans and the natural environment. And, though McNeill did not write big history, it seems that he was increasingly attracted to the idea, seeing it as a natural extension of his own broad vision of history and as the sort of grand unification that was already taking place within the natural sciences. In his final years, Big History was, as his son, John, has written: "the thing that excited him most (aside from grandchildren)".[5]

Since the late 1980s, big history has attracted increasing interest within the history disciplines and within the Humanities as a whole. Today, big history is being taught in many universities and also in an increasing

number of high schools in the English-speaking world. There is now a professional association in the field (the International Big History Association, which is planning its own professional journal) and a growing scholarly literature. Though big history is very new, it is now clear that the project of constructing a modern origin story is viable. Furthermore, that story is eminently teachable and can offer an educational foundation that links knowledge from many different disciplines. The "Big History Project" offers a free, online high school syllabus in big history that is being taught in many high schools, mainly in the USA and Australia. Crossing disciplines from cosmology to geology, biology, anthropology, and history, big history does what traditional origin stories have done, but it does it with the information of modern science and it draws on information and research from the entire world. It is the first origin story *not* anchored primarily within a particular national or religious or cultural tradition, even though it first emerged within the Christian world of Europe.

9.5 Does Big History Need Minimal English?

As yet, though, big history has flourished mainly in the English-speaking world. The work of scholars studying Minimal languages highlights the possibility that big history could be linguistically "imprisoned" within a particular linguistic tradition. Is it possible that the language within which the big history story is being told could sabotage the project's hope of building an origin story for the whole of humanity? How can the big history story be translated adequately into the many different languages of humanity? These are serious questions and suggest that the big history project may need the profound insights of scholars of minimal languages if it is to succeed. Can the big history story be translated into all the languages of humanity without smuggling in the cultural assumptions of the dominant global language, English?

The Big History Project faces three distinct problems of translation. The first is to translate into many different languages. There are already steps in this direction, and big history is being taught in a small number of non-English-speaking schools in the Netherlands, Korea, and else-

where. But most teaching at present is in English. Wierzbicka and Goddard have alerted us to the danger that translations from English versions of Big History will smuggle Anglo assumptions into other languages and other pedagogical traditions.

A second task is to translate between the many different disciplinary dialects of scholarship, research, and teaching in English. Hyperspecialization has created such stark divisions within modern research institutions and universities, that new dialects have emerged even within the subdisciplines of particular areas of study. Take the word, "gene": "Is it a heritable trait, as seen by the geneticist? Is it a segment of DNA, as seen by the molecular biologist? Is it a protein factory, as seen by the biochemist? Is it a developmental switch, as seen by the embryologist? Is it even, perhaps, an active, utterly selfish being, as depicted by some evolutionists?" (Ziman 2000: 8).

Much of the challenge of teaching big history has involved translating from various dialects of academese into a conversational English that is accessible to most moderately educated English speakers. All who have written about big history have faced the challenge of translating from specialist jargons into language that can be understood by a wider educated public. And it can be very tricky to translate concepts such as entropy or natural selection without losing nuances that seem profoundly important to specialists. For better or worse, the cosmologist's "singularity" becomes the non-cosmologist's "tiny point in space-time", the geologist's "igneous rocks" become the non-geologist's "lavas or molten rocks from volcanoes", and so on. Some technical terms, such as "entropy" or "free energy" or "emergence", are worth retaining after careful attempts at explanation. Others, such as "complexity", have never lost their familiar meanings so, with care, they can be adapted for big history, though they lack rigorous, universally accepted scientific definitions. None of this is easy, and the danger of mistranslation or misunderstanding is always there. But translating between different scholarly dialects is surely easier than translating between distinct linguistic and cultural traditions, as most modern scholars share the core ideas and practices of the modern world of scientific scholarship.

Studies of Minimal English point to a third possible approach to the task of translation. Could the big history story be translated into Minimal

English and then into other Minimal languages? If so, could that solve some of the problems of translating between different languages and different disciplinary dialects?

Anna Wierzbicka has experimented with translating a simplified version of the big history story into Minimal English. Extracts from that translation are available in the Appendix to this chapter. If Wierzbicka is right that Minimal English can capture concepts that are universal to all humans, then it is tempting to think that this is the natural language for a big history narrative. It is also a natural pedagogical strategy. As Wierzbicka argues in her essay in this volume (Chap. 8), using Minimal English will allow the educationally sensible procedure of building up to important scientific concepts, systematically, from concepts that are universally understood. Such an approach should also avoid the circular definitions present in many educational environments, in which complex concepts are *not* constructed step by step, but are defined in reference to other complex concepts.

But the project of translating Big History into Minimal English raises a host of new problems. Let's accept the argument that something like Minimal English might free the big history story of most of the cultural and linguistic biases of modern Anglo English, the dominant language of today's world. If true, that would mean that a version of the big history story in Minimal English could be translated easily into all human languages, and it would carry minimal cultural baggage. It would be transparent, and universal. It would also be pedagogically transparent, in so far as its concepts were constructed carefully from the universal conceptual units of minimal English. That's a very appealing vision because it suggests that Minimal English is the natural vehicle for the first origin story intended for all of humanity.

But transparency and universality are not the only demands we might make on the language of a modern origin story. If we are to take seriously the idea of big history as a modern origin story, there are other demands the story should meet as well. They include accessibility, linguistic play, and technical precision.

Accessibility Origin stories have been powerful vehicles for education, probably in most human societies. To play this role, they must be

accessible and appealing to students at many different levels. It should be possible to tell them simply to the very young while reserving more complex parts of the story for later stages in education, and the most complex parts for scholars. The Big History story is already available in several versions. There is scholarship intended for research scholars in different fields; there are pedagogical materials in print (including a college-level textbook) and online (the Big History Project), that are being used in universities and high schools. In addition, one or two schools, as well as a number of Montessori schools, are already experimenting with primary school versions of the Big History story. From these preliminary experiments, we already know that the big history story can be told at many different levels of precision and complexity.

Will versions in Minimal English be able to play this educational role? As the partial version in the Appendix shows, Minimal English can be very simple, and it can achieve a lilting beauty. Nevertheless, its grammar and vocabulary are unusual enough that it will not feel as accessible as colloquial English. It will have to be learned, and that will surely limit the accessibility of texts in Minimal English. Furthermore, its extreme simplicity means that Minimal English strips away a vast number of concepts and nuances from conversational English. Many of these are used in conventional language as shortcuts, ways of getting ideas across efficiently and quickly, such as the idea of a "dinosaur". The austere, but pedagogically sensible, argument that students should be led, step by step towards complex concepts, beginning with conceptual universals, is perfectly realistic, as Wierzbicka's Chap. 8 (this volume) argues. But it will prove extremely difficult in practice to avoid the many pedagogical shortcuts used in most modern educational environments. It will be particularly tricky where scientific concepts overturn intuitive concepts, such as that the earth is flat or that every particle has a definable position. Those writing in Minimal English will have to work their way very slowly even towards quite simple concepts, such as stars or planets, and the chronology that lies at the heart of current versions of the big history story will acquire some elaborate explanation.

Linguistic Play To play their educational role, origin stories also need to be engaging. Their power depends very much on the language in which they are told or written down. But word play, poetry, and the beauty of texts such as the Koran or the Buddhist sutras or the King James Bible all depend on word play, which in turn depends on the associations that hang around the vocabularies of ordinary languages. Can any origin story abandon the poetic overlay and the word play of ordinary language? Surely, Minimal English could, over time, develop a poetry of its own and gather new acoustic and semantic associations if it is used more widely. But if Minimal English were to be used with enough regularity to acquire these accretions, the paradox is that it would lose its extreme clarity and transparency, because the accretions would arise out of the larger linguistic molecules which, even in a minimal language, will be specific to a particular language and dependent on the word play that is possible within that language.

Technical Precision Finally, technical jargon has a role even in origin stories because, once explained, jargon words can introduce a new level of precision and variety into a complex story. Compare the following two stories about the evolution of single-celled organisms to produce the first multicellular organisms. The first is from the Minimal English version below:

For a very long time, no living creatures had bodies like people have bodies. During this time, many things were happening to living creatures of some kinds. After this, living creatures of some kinds had bodies, like people have bodies. Some of them lived in the water, some of them lived not in the water. For a very long time, the bodies of living creatures didn't have parts like parts of people's bodies. During this time, many things were happening to living creatures of some kinds. After this, the bodies of living creatures of some kinds had some parts like parts of people's bodies.

The second comes from an appendix to my own version of big history:

> Over the next three and a half billion years, these simple, single-cell organisms became more and more diverse, evolving through 'natural selection'. Quite early, some learnt to extract energy from sunlight through the pro-

> cess of photosynthesis. … Powered by the Sun, living organisms spread through the seas, and eventually over the land, creating an interconnected web of Life that had a profound impact on the atmosphere, the land and the sea. From about 600 million years ago, there began to appear larger organisms, each made up of billions of individual cells.

The Minimal English version has a certain beauty to it, but without the shortcuts provided by jargon and word play, it is bound to be extremely general. Specificity and technical precision can be achieved in Minimal English only after a long run-up. Technical jargon does indeed need to be explained, even in ordinary language, but it usually builds on already existing jargon words or sometimes on familiar word play, such as the phrase "big bang". So it offers shortcuts that allow the storyteller to cut faster to the chase. Can Minimal English capture the subtleties of quantum physics or entropy without such elaborate linguistic circling that the core ideas get lost in the maze? Can we discuss agriculture without the idea of "drought", an idea that is not present in indigenous Australian languages (Wierzbicka 2014: 10)? Even tougher, can we explain fossil fuels or steam engines or pressure or energy adequately into minimal English? Minimal English could surely evolve its own technical jargon as it is used in different social, cultural, religious, and scientific contexts. The trouble is that, as it does so it will be in danger of losing the qualities that make it transparent and universal.

9.6 Conclusions

The scholarship in Minimal languages raises some important and serious problems about the big history project, and particularly about the language in which it is cast. Yet it is clear that the translation into Minimal languages will not offer a simple solution to these difficulties, because Minimal English (or any Minimal language) will struggle to achieve the levels of accessibility, playfulness, and precision that will be needed if a modern origin story is to appeal successfully to humanity as a whole.

Do these difficulties sabotage the project of constructing a modern origin story that can be told with clarity, transparency, and universality?

Do they suggest that the very idea of an origin story for all of humanity is a Utopian dream? Are all origin stories tribal by their very nature?

I am reluctant to believe this for the simple reason that modern nationalisms have managed to forge powerful national narratives from extremely diverse cultural, linguistic, and ethnic raw materials. Indeed, the building of modern nation states and modern nationalisms has much to teach us here. If powerful national identities can be forged from immigrant communities such as the USA, or countries with multiple languages and multiple religious traditions, such as India, then why not build narratives that can appeal to the even broader community of humanity as a whole? However, the histories of modern nationalism also suggest that building group identities for larger communities has ever been a painful process. It has involved a lot of forgetting of older identities and traditions, sometimes after catastrophic wars or ethnic relocation. Modern US nationalism itself would be very different if it were not for the US civil war. It may well be true that all origin stories succeed by burying older stories. Perhaps there really is no way of creating a global origin story that does adequate justice to all human communities and languages.

Nevertheless, aiming at such a goal is surely worthwhile, and it may be that both the projects discussed in this chapter will have a role to play in forging a broader sense of a shared human identity. Minimal English takes us back to shared concepts that may well be fundamental to our species. But, for the reasons we have seen, origin stories in Minimal English will struggle to achieve the accessibility, playfulness, and precision of traditional origin stories couched in more familiar language. Big History, in so far as it makes use of existing languages, beginning with modern Anglo English, will inevitably adopt some of the strategies of modern nationalisms. It will try to tell a story that builds on knowledge shared in much of the world today, at the risk of smuggling in many of the assumptions of a dominant linguistic and cultural tradition. As scholars of Minimal English have pointed out, this may undermine the project of teasing out an identity that works for humanity as a whole.

Both projects will surely have an important role to play in building a modern sense of a shared human identity and shared human goals. And it is important to remember that both projects are still in their infancy, and we have much to learn about their possibilities and limitations. But

finding the right way of constructing a sense of shared humanity is, today, even more urgent than it was in H.G. Wells' time, because today we have built weapons that could turn tribalism into a global catastrophe, and we face environmental problems that can only be solved through global collaboration.

Appendix: A Partial History of the World and the Rise of Humanity, Told in Minimal English (Anna Wierzbicka and Cliff Goddard, September 2016)

THE "BIG BANG"

A very very long time ago, before there was anything anywhere, something happened. It was not like anything else. Before it happened, there was nothing anywhere, nothing was happening anywhere. After it happened, it was not like this anymore. There were many places. Many things were happening in these places.

THE EARTH

A very very long time after, there was a place not like other places. This place was the Earth. For a very very long time, the Earth was not as it is now. There were no places of any kinds on Earth as there are now. There were no things of any kinds anywhere on Earth as there are now. There was no water anywhere on Earth as there is now.

During this time, many things were happening to the Earth. After this, there were places of many kinds on Earth as there are now, there were things of many kinds in some places on Earth as there are now, there was a lot of water in some places on Earth as there is now.

LIFE ON EARTH

For a very long time, there was nothing living on Earth. At that time there were no living creatures of any kind, there were no things growing in the ground. During this time, many things were happening on Earth. After this, there were living things in many places on Earth, these living things were very very small. For a very long time, they could not feel anything. At the same time, they could know not anything about anything. During this time, many more things were happening on Earth.

A long time after this, there were living creatures of many kinds on Earth. These living creatures could feel something, they could know something about the place where they were, they were very small. At that time there were things of many kinds growing in the ground in many places on Earth.

For a very long time, no living creatures had bodies like people have bodies. During this time, many things were happening to living creatures of some kinds. After this, living creatures of some kinds had bodies, like people have bodies. Some of them lived in the water, some of them lived not in the water.

For a very long time, the bodies of living creatures didn't have parts like parts of people's bodies. During this time, many things were happening to living creatures of some kinds. After this, the bodies of living creatures of some kinds had some parts like parts of people's bodies. During this time there were many living creatures of many kinds not like there are now. Some of them were very big. Some of them lived on the ground, some of them lived in the water, some of them lived above the ground.

For a very long time, no living creatures could think anything about anything. During this time, many more things were happening to living creatures of some kinds. After this, living creatures of some kinds could think some things about some things.

For a very long time, no living creatures of any kind could say anything to any other living creatures. During this time, many more things were happening to living creatures of some kinds. After some time, living creatures of some kinds could say some things to other living creatures of the same kind. They could say these things with their bodies, not with words.

THE RISE OF HUMANITY

For a very long time, there were no people on Earth. During this time, many more things were happening to living creatures of some kinds. After this, the brain of living creatures of some kinds was not like it was before, it was big. After this, there were people on Earth.

PEOPLE'S BODIES

People had bodies, like living creatures of many other kinds had bodies. At the same time, these bodies were not like the bodies of other living creatures. Because of this, people could move not like other living creatures moved. At the same time, people could do many things with some parts of their bodies.

People's bodies were like this:

One part of the body was above all the other parts. This part was the head. When people were moving for some time, this part was not near the ground. Two long parts of the body were below all the other parts. These two long parts were the legs. When people were moving for some time, these parts

were touching the ground, no other parts of their bodies were touching the ground.
Two other long parts of the body were on both sides of the body. Two parts of these two long parts were not like any other parts. These two parts were the hands. People could move the hands in many ways, as they wanted. Because of this, they could do many things to many things with the hands, as they wanted.

PEOPLE'S BRAIN
People's brains were not like the brains of other living creatures, people's brains were very big. Many things, of many kinds, were always happening in people's brains. Because of this, people could think many things about many things. At the same time, people could say many things about many things.

SAYING THINGS WITH WORDS
People could say many things with words. Because of this, when someone knew something about something, this someone could say it to someone else. After this, this other someone could say it to some other people. At many times, people could say it to children. When these children were not children anymore, they could say it to other children. Because of this, after some time, many people in a place could know many things about many things.

THINKING WITH WORDS
People could say many things with words to other people. At the same time, people could think about many things with words. Because of this, people could think about many things, as they wanted. They could think about many things for a long time.

WHAT PEOPLE COULD THINK
People could think things like this: "I did something a long time before", "I will do something a long time after". They could think things like this: "All people die, I live now, after some time, I will die". They could think things like this: "People can do good things, people can do bad things; I can do good things, I can do bad things". No other living creatures could think things like this.

HOW PEOPLE LIVED
People lived not like any other living creatures on Earth lived, they lived like this:

They lived with many other people. They said many things of many kinds to many other people. They did many things with many other people. Because of this, many people could do many things as they wanted. After some time, they could do something to many things with fire, as they wanted.

WHAT PEOPLE WANTED TO DO
People wanted to do many things to many places. They wanted to do many things to things of many kinds in many places. They wanted to do many things to living creatures of many kinds in many places.

WHAT PEOPLE WANTED TO KNOW
People wanted to know many things about many things. They wanted to know many things about people. They wanted to know why there are people on Earth. They wanted to know what happens to people after they die. They wanted to know how people can live well.

People knew that it is like this: they can see some things, they can't see some other things. They wanted to know something about all these things. They wanted to know what happened a very very long time before. They wanted to know what will happen a very very long time after.

Notes

1. On the idea of the Anthropocene Period, there is now a huge literature, for example, McNeill (2000), Steffen et al. (2007), Williams et al. (2015).
2. On the current nuclear arsenal, see "Status of World Nuclear Forces", accessed June 16 2014 from http://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/.
3. Newton later tried to retract the idea of the universe as God's "sensorium", but preserved the notion, as a friend put it after conversations with him in 1705, that God was "omnipresent in the literal sense", and "present in space where there is no body [and] present in space where a body is also present" (Westfall 1993: 259).
4. My first major publication on big history was Christian (1991), in the journal of the World History Association.
5. International Big History Association newsletter, "Origins", 2016, VI.08: 7.

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10

Introducing the Concept of the '65 Words' to the Public in Finland

Ulla Vanhatalo and Juhana Torkki

10.1 Introduction

On 14 March 2016, the largest Finnish newspaper *Helsingin Sanomat* published a front page online article, titled 'Theory: All things in the world can be explained with 65 words—this is how the theory opens Finnish politics'. This chapter outlines how a linguistic theory called Natural Semantic Metalanguage (NSM) became breaking news in the Finnish media, with the goal of sharing ideas on how applications of NSM can be used for answering the lexical semantic needs of the general public. Parts of the chapter rely on principles of the sociology of scientific knowledge, which help explain the social conditions and the process of popularizing the NSM approach. We also report on how the Finnish public has responded to the '65 words' method.

Natural Semantic Metalanguage (NSM) is a linguistic approach to meaning, applied for analyzing the meanings of words, grammatical elements, cultural scripts, and so on. The method has been practised in an

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academic environment from the 1970s by linguists specializing in cross-linguistic semantics (see Chap. 2, this volume; cf. Goddard and Wierzbicka 2014). The key ideas of NSM, however, are also of interest and importance to the general public. The concept of 65 universally understandable words which can be used for explaining all the other words is indisputably groundbreaking. There are two main purposes for which the '65 words' method, as it is known in Finland, can be publicized and promoted: first, for explaining and discussing the meanings of difficult abstract words, and second, for thinking, speaking, and writing more clearly about complex issues in human life.

The need for explaining word meaning arises from well-known problems in human communication. Especially when talking about abstract culture-dependent concepts, such as values, norms, emotions, politics, religion, or relationships, normal everyday words may easily be misunderstood. This leads to negotiations about the very meaning of words, both in private and public discussion—What do you mean by using a word like this? What does this or that word really mean? Not surprisingly, dictionaries are often used as an 'unbiased' source for checking word meanings, yet even nonlinguists soon realize the shortcomings of dictionaries. Dictionary definitions are often thin or dated, they may lack crucial information, they may consist only of synonyms, and they may be circular. For example, if one wants to find out the meaning of the Finnish verb *luottaa* ('trust, rely on, believe') in the official dictionary Kielitoimiston Sanakirja (2017), one would find a definition *pitää jtak varmana*, *taattuna*, *olla epäilemättä jtak*, *uskoa jhk* ('take something granted, be without suspecting, believe something'). The Finnish *varma* 'granted', however, is defined as *luotettava*, *pettämätön*, *turvallinen*, *vakaa* 'trustworthy, infallible, safe, firm'. Instead of a clear explanation of meaning, all that is provided is a list of synonyms. Dictionaries thus do not necessarily provide much help for meaning negotiations. Yet even highly educated people tend to have sincere trust in dictionaries, possibly because there are no other tools available for finding knowledge about lexical meaning. This highlights the need for increased access to research-based lexical knowledge across various areas of society.

In Finnish society, discussion around word use and meaning has always played some kind of role. Even without systematic data collection, it is

easy to locate articles including discussion of word meanings in the Finnish newspaper *Helsingin Sanomat*. During the years 2013–2016, for example, we found debates on words such as *unelma* 'dream' 2 March 2014, *hullu* 'fool' 8 June 2013, *yksinäisyys* 'loneliness' 25 February 2014, *vainoaminen* 'persecuting' 8 July 2016, *ryssiä* 'screw up' 10 August 2014, *haastava* 'challenging' 19 January 2014, and so on.

Some of the *Helsingin Sanomat* articles included emotional arguments for or against certain definitions, and the question of who has the right to attribute meanings sometimes led to heated discussions. *Hullu on uusi neekeri* ('Fool is new nigger') was written in the letters to the editor 8 June 2013, followed by a reply the next day: *Väitän, että sanat hullu ja mielisairas eivät ole synonyymejä keskenään eikä arkikielen hullu loukkaa mielisairaita* ('I claim that the words fool and mentally disabled are not synonyms and the everyday word insane doesn't hurt mentally disabled people').

If even people sharing the same native tongue can end up debating over word meaning, misunderstandings are much more likely when people use languages other than their native tongue. In relatively monolingual Finland, this has been much discussed in the wake of the massive immigration spike in autumn 2015. Tens of thousands of people, mainly from the Middle East, faced the Finnish society. New reception centers were founded in a hurry, sometimes overnight. The newcomers, mostly young men, were soon on the streets. Discussions on values, norms, and cultures, and related terminology, sprang up quickly. What do the Finns mean, for example, by the verb *seurustella* 'date, go together', and how to find the correct equivalent in languages spoken in Syria, Iraq, or Afghanistan?

Strong voices were heard from politicians who wanted to be sure that the immigrants would be included in society. The Finnish Prime Minister Petteri Orpo spoke in the media about how the immigrants will be signing a document stating that they *kertovat ymmärtävänsä Suomen tavat ja lait sekä lupaavat noudattaa lakeja* ('understand Finnish customs and laws and promise to follow the laws'), *Helsingin Sanomat* 3 December 2015. Not too much attention was paid to the questions of what was meant by the Finnish words *ymmärtää* 'understand', *tapa* 'custom', *noudattaa*

'follow', and *laki* 'law' and how the related concepts were presented in the languages spoken by the immigrants.

At least in Finland, experts in lexical semantics have not been especially keen on participating in public discussion on word meaning. One reason may be the diverse conceptions of the nature of lexical meaning (Geeraerts 2009). Without a firm, irrefutable, and mutually agreed ground for researchers in lexical semantics, who would be the one to offer his or her view to the public audience? Another possible reason is the lack of suitable tools for public presentation, which may sometimes seem too naïve or simplistic from the academic perspective.

Yet there is a way forward. At least one approach in linguistic semantics has the potential to engage with the various meaning-related questions that arise in the public space. The Natural Semantic Metalanguage provides a solid theoretical background and a practical tool of 65 words to deal with the need to dissolve semantic complexity. Should the theoretical assumption of universal units of human cognition be too hard to digest for some, the practical method cannot be resisted once it has been demonstrated and proven successful.

The need for the '65 words method' goes deeper than the level of communication. Clear discussion can only follow after clear thinking. The presumption is that the use of complex vocabulary in discussions may indicate unclear thinking or even intentional concealing or misleading. The use of the semantically simple words of NSM, however, prevents one hiding one's actual thoughts. Instead, speakers are forced to formulate their message transparently and unambiguously. Whatever can be said, it can be said semantically simply. Saying and thinking simply goes along with rising trends outside of academic research (Segall 2016).

In Sect. 2 we relate the story of the Finnish '65 words' project and describe the modifications made for the popularized version of Finnish-based NSM. Sections 3 and 4 present case studies of how the method was represented in the media and received in the public space. In Sects. 5 and 6, we suggest some guidelines for introducing NSM to the public audience. In Sect. 7 we raise some issues to be considered when practicing NSM applications outside the academy.

10.2 How Did the Finnish-Based NSM Become the '65 Words Method'?

10.2.1 The Story of www.65sanaa.fi

On late December 2013, old friends JT and UV (the authors) met at a Christmas party. They hadn't seen each other for a while, as UV had lived in Australia for a couple of years and returned only the previous summer. JT asked about what UV had done lately in her research. The idea about 65 semantic primes hit JT immediately. He challenged UV to explain his occupation (speech consultant) with the primes. Within 10 minutes JT was convinced.

The foundational idea for the project was set quickly: the concept of the 65 words is a brilliant tool which must be opened for the public audience. Having had a long career as a teacher and writer on public speaking and public discourse, JT had a vision about how the theoretical linguistic approach could convert to an easily accessible method which from every speaker could benefit.

The first plan in early 2014 was to complete a book, something in the same vein as JT's previous books (Torkki 2006, 2014, 2015; Torkki and Miettinen 2008). Material collection started: articles from Finnish newspapers and magazines, interesting words, NSM explications, and ideas to be developed. The plans were discussed and elaborated with Cliff Goddard during his visit to Finland in September 2014. At the early stage, the method was also put into actual use. The first version of a compact, easy-to-use NSM starter kit was created. The vertical list of NSM primes was grouped more visually, and a short user guide with some examples was added. The one-to-two-page handout was used in a few workshops. Based on feedback from participants, the starter kit was revised several times.

The book material accumulated, yet the genre of the book was difficult to decide. Various options were considered, from a plain practical handbook to deep cultural analysis related to Finnish society. Finally, in the fall 2015, the plan got clear: Let's make a webpage. Open to everyone, flexible, and easy to update. The page www.65sanaa.fi (65 words) was launched in late February 2016, after consultations with several helpful

experts from fields outside linguistics. After the launch, the link was shared and referred to at various public events.

JT, as a well-known consultant on public speaking, is often asked to comment on public issues in Finnish society. Since the www.65sanaa.fi page was published, he has been offering the NSM application for analyzing and commenting on speeches in media. Through these media requests, the method of 65 words has attracted attention and gained publicity. According to the statistical tools related to the webpage, the page had been visited by 6277 individual users (robots excluded) by 16 September 2016. The average number of daily individual visitors from March 2016 until September 2016 was 34, the highest number of visitors being 1164 on 14 March 2016, the date of the *Helsingin Sanomat* article (see 10.3.1).

10.2.2 The Structure and Content of the www.65sanaa.fi Page

The webpage, all in Finnish, consists of seven main headings, which can be translated into English as: *Which 65 words?*, *Who can benefit from the 65 words?*, *Try it yourself!*, *Samples*, *FAQ, Contacts*, and *Blog*. Two of the main headings have subheadings: *Which 65 words?* includes *The method*, *The primes in Finnish*, *The primes in other languages*, and *Theory and Research*, while *Try yourself!* includes *How do I use the primes?*, *Starter kit*, and *Exercises*.

The front page has an introductory text, as follows:

> Did you know that all words in the world can be explained by just ca. 65 core words? Those words are found in every language in the world, and with these words all meanings can be explained. On these pages you can try yourself how e.g. *trust*, *lawyer* or *money* are explained with this super language. These pages are created because there are so many fights in the world, caused by misunderstood words. And because politicians are constantly misleading people by using nonsense vocabulary. Words construct reality—and hide it. Learn to see, how.

A target reader is described under the heading *Who can benefit from the 65 words?*:

> We wanted to make this page for you / who think about word meaning for your work or just for fun / who are annoyed by the use of nonsense words in the public speech / who meet with immigrants, people with mental disabilities or memory disorders or others who need plain language / who have to explain to children what words mean / who try to figure out your own thoughts or feelings / whose relationship has turned to ping-ponging words with vague meaning / who experience people talking past each other / who don't always understand what words in a foreign language mean / who want that things are spoken as they are / who try to solve a crisis between other people / who want to speak or write so that your message certainly goes through / who want to get as close as possible to someone's thinking / who wish to avoid ambiguity in communication in some situation / who have realized that through different languages, the world seems to be totally different / who want to examine the deepest essence of some phenomenon. We know the method. Reading these pages, you'll know where it is needed.

Throughout the webpages, the reader is provided with necessary information and encouragement for practising the method. Theory is presented only as much as needed, in short chunks with illustrative examples. Links lead to other pages with more information. Readers with a linguistics background are also considered, as many links finally lead to the Natural Semantic Metalanguage homepage at Griffith University.[1]

Plenty of examples can be found on the webpages. An alphabetical list of sample explanations includes words such as *ahdistunut* 'distressed', *Jumala* 'God', *juristi* 'lawyer', *raha* 'money', *taiteilija* 'artist', *yksinäinen* 'lonely', and *yt-neuvottelut* 'employee co-operation negotiations'.

The reader is provided with the starter kit, a printable A4 sheet with the primes and a short user guide. A hands-on practice is provided for the verb *luottaa* 'trust' in the context *En luota sinuun* 'I don't trust you'. In that sample, the thinking process behind an explanation is described in detail. A great number of open exercises are provided as well, grouped in sections such as *Cultures meeting each other and immigration*, *Society and politics*, *Work life*, *Children and parenting*, *Emotions and relationships*, and *Values, norms and world views*. An open exercise can be like this: 'The values of a company are presented at the company homepage. One of the values is "caring for the employees". – Say by using the primes, what "caring"

means'. Many of the exercises are based on articles picked up from the Finnish media.

The reader is told that the explanations provided on the page are not the official or only possible definitions, 'as most words don't seem to have those—they rather live and change their meaning from one situation to another. The primes rather help to analyze meaning'.

In the FAQ, various questions are being taken into consideration:

> Why are the normal words not enough for explaining the meaning of other words? That's what is done in monolingual dictionaries. / I compared the prime lists in different languages and noticed there are not equal numbers of words. Why? / I'm not interested in analyzing word meaning. Can the primes somehow benefit me? / What is the selection of primes based on? / Why the list doesn't include words such as 'and', 'also' or 'or'? / I've heard that earlier there were less primes than nowadays. Why? / How can you say a word meaning can be defined? Meaning is changing all the time from a context to a context! / I'd like to define one word by using the 65 words. But I just can't do this, as the 65 words are not enough for my case. Can I use other words as well? / Can I use the primes and material from this page for teaching purposes? / I want to learn quick Spanish / Korean / Cantonese / Serbian. Is it enough if I just learn to use the 65 words? / What's the difference between the popular prime kit made for the public audience and the list of primes used in linguistic research? / I found a word which cannot be explained by primes. See, the system doesn't work! / I explained something by primes in Finnish. Can I translate the explanation to French so that the content will remain the same? / Where can I find the list of primes in Hindi, Estonian, Portuguese or in some other languages? / If the primes are as effective as you're saying, why are they not applied much more and everywhere? / Can the use of primes be harmful? / Are there any books available, written just with primes? / What is the relationship between the primes and Easy to read language? / If the primes are fully translatable between all languages, wouldn't it be possible to make machine translations? / I want to learn more how to use the primes. Where can I study this? / So are you claiming that this method works 100% everywhere?

The page has a blog, even though just a few blogs have been published so far. The blogs show in practice how the 65 words method has been applied to some current issues in the Finnish society, mostly inspired by

newspaper articles. The titles of the blogs are *Can an Arab pray for peace?*, *Talk about human rights if you wish to get understood wrong*, *Hassan, please show us you deserve our confidence*, *A garbage man or a raw-material collector?*, and *Soul*.

10.2.3 The Modifications Made to the Finnish-Based NSM

Our first attempts to introduce NSM to Finnish-speaking nonlinguists were made with the help of the academic versions of NSM prime sets, in both the English (Goddard and Wierzbicka 2014) and the Finnish (Vanhatalo et al. 2014) versions. Very soon it became clear that even if the academic versions were able to transmit the key ideas of NSM, they were, in parts, a bit cryptic and confusing for a nonlinguist user. Based on comments from nonlinguist users, we made some modifications so that the so-called starter kit could be as approachable and user-friendly as possible. The modification process included combining, removing and even adding some primes, visualizing and regrouping the prime set, simplifying grammar notes, and finally adding some general instructions for use. The modifications are reported in the following subsection. Some attention is also paid to terminological remarks.

Combining, Removing, and Adding Primes The conventional academic set of semantic primes has specific primes for representing location (TO BE SOMEWHERE), existence (THERE IS), and specification (BE SOMEONE/SOMETHING), all of which are represented with the same verb *olla* in Finnish. As the semantic differences between these primes are not significant, or even readily distinguishable, to a nonlinguist, we decided to include only one prime OLLA in the set.

Regarding the primes referring to time, we added a lexicalized form JOSKUS ('sometimes') from JOKIN (some) + AIKA (time). Another lexicalized form added was AINA ('always') from KAIKKI (all) + AIKA (time). These frequently needed combinations are fairly transparent and smooth in the English-based NSM, but in Finnish-based NSM directly

combining these primes in phrases would sound clumsy. There might be other similar cases where low-level molecules or portmanteau forms (see Chap. 3) would be worth including in the prime set.

In the category of substantives, we replaced the plural form IHMISET (people) by the singular form IHMINEN. Also the prime SANA (word) was presented in the singular instead of the plural form. The pronoun HÄN (s/he) is presented as an allolex of the prime JOKU (someone).[2] With the pronouns, the instructions say that MINÄ 'I~me' can also be used in plural *me* 'we', and accordingly SINÄ 'you' in plural *te* 'you'. These were specifically listed in the prime set, even though it was mentioned in the instructions that all the words can be declined.

With the mental primes, a conjunction *että* 'that' was added in brackets after the mental verbs AJATELLA (think) and TIETÄÄ (know) to instruct the recommended use of these primes. Adding the conjunction to these primes only, while leaving TUNTEA (feel) without it, would also imply that the latter should not be used with a subordinate clause. Some other additions were made. The logical concept EI (not) was followed by a grammatical allolex *älä* 'don't', as the imperative form in Finnish is irregular and thus not easily recognizable by a nonlinguistic user. Temporal ENÄÄ (anymore) was added to ENEMMÄN (more). (We are even considering having *ja* 'and' and *tai* 'or' in the starter kit.)

Apart from the cases just discussed, we have been very careful with adding anything. Yet there have been requests from the public audience for getting more consistency to the set of primes. It has been asked, for example, why there is no counterpart ULKO (outside) for the prime SISÄ (inside), as similar pairs can be seen with PÄÄLLÄ (above) and ALLA (below) or LÄHELLÄ (near) and KAUKANA (far). As a generic answer to these questions, we have replied that if any seemingly universal word is missing from the set, it might not be found in all languages or else the meaning can be explained with other primes.

Grouping and Visualizing the Primes For a nonlinguist user, the category names for the prime groups (substantives, mental predicates, possession, etc.) seem to be more confusing than helpful. People are primarily interested in the primitive words and much less so in the linguistic groupings, and so we have not been presenting the category names. Having the

primes listed in alphabetical order or without any grouping wasn't working well either, so we ended up grouping the primes in a way which was easy to present to a Finnish-speaking nonlinguist. The grouping was made visual by circles (see Fig. 10.1). For example, almost all verbs, excluding EI (not), were presented as a single group, whereas in the conventional NSM table, they are divided between several categories such as mental predicates, speech, and actions. All the nouns and personal pronouns were put together in one group, while the rest of the pronouns formed another group. Adjectives comprised a small group on their own, as did the time and place primes. The last group included the rest of the primes, expressing logical concepts and other relational words. To avoid confusion, we did not add labels to the prime groups, allowing each user to perceive the picture according to his/her background knowledge. In presentations and workshops, however, the groups have often been orally illustrated along the following lines: 'here are some verbs, here are expressions related to time or place…'.

Fig. 10.1 A printable starter kit available at the webpage www.65sanaa.fi (September 2016), with the primes grouped so as to be easy for a Finnish-speaking nonlinguist (general instructions for using the primes are given at the top right of the figure (for the English translation, see Sect. 2.3))

Later in 2016, a refined version of the starter kit was created by presentation designer Timo Sorri. See Fig. 10.2. Besides having nice fonts, colors, and a balanced layout, the second version has visual symbols illustrating each group of primes. The symbols help users to perceive the picture without having possibly disruptive verbal categorization.

Notes on Grammar The NSM grammar which comes along with the primes has two important functions. Firstly, in the form of the canonical sentences, the grammar helps with polysemy by excluding meanings other than the relevant sense of the word in question. Secondly, the canonical sentences combined with the few grammatical notes instruct how the primes are to be used in practice.

Yet the beef of the NSM is the primes, the 65 simple concepts understandable by all people. The magic words are also the big news that hits the nonlinguist audience. When introducing the '65 words method' in public, we have consciously faded out the grammar aspects. No canonical

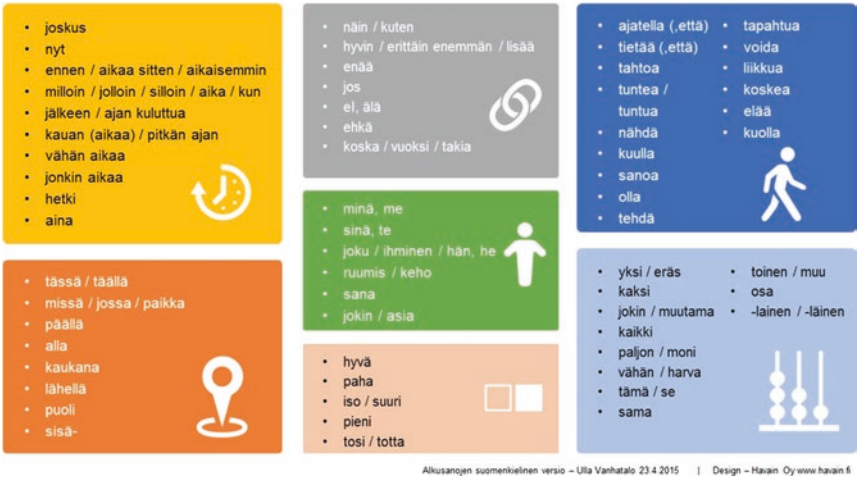

Fig. 10.2 A second version of the starter kit by designer Timo Sorri, from the Finnish company Havain Oy. Colors and visual symbols help users to understand the picture. Used with permission

sentences are provided in the starter kit. The only grammar note given in the instruction column is very short: 'You can decline and combine the words.' So yes, you can use plural, imperfect, conditional, or comparative, and you can make short or long sentences as you please. Just keep your sentences understandable.

According to our experience, the grammar—or the lack of grammar instructions—has not been a problem to the Finnish audience. There have been some questions about the grammar, but those have been come from people with linguistic backgrounds. For their needs, the webpage www.65sanaa.fi provides plenty of information, starting from the canonical sentences in Finnish and ending up with links leading to the official NSM research homepage.

We have carefully considered the risks of 'inappropriate' use of grammar, such as use of relative clauses, comparison of adjectives, or errors with polysemy. Those mistakes could possibly be avoided, or at least reduced, by detailed grammar notes. Yet as we see it, the risk of making the 65 words method look too complicated and laborious is much more serious than the risk of even major grammatical errors. Getting the public interested in the primes is a huge achievement that has a great potential to clarify communication and improve people's lives. Getting the public using the method at (let's say) 70% accuracy would be a true victory for semantic research, let alone the influences at the individual level. The detailed grammar instructions can be saved for those who are keen on the linguistic background theory and who will possibly invent further applications for the method.

General Instructions Besides the primes, the printable starter kit includes short four-point instructions:

- With these ca. 60–70 primes, you can explain basically everything. Use the method when you (i) wish to say a complex thing simply or (ii) explain a difficult word meaning. The primes are especially useful when explaining abstract things.
- You can decline and combine the words. Please try to use only the given words; however, if this does not always happen, that's ok.

- You can start by drawing a circle on those words which might be involved the thing in question.
- You've got a real magic kit of communication: these core concepts of thinking can be found in all languages!

In the presentations and workshops, we have emphasized the usefulness of the method with abstract concepts. Depending on the audience, we have brought examples of values, norms, customs, thoughts, feelings, terms, and so on. Sometimes we have presented circular definitions taken from dictionaries, or we have pointed out some familiar concepts which actually appear to be surprisingly complicated to analyze and define.

Both in the workshops and at the website, we have provided a sample process of making an explication. We have tried to explain our thinking process in detail and after that encouraged people to try their own exercises. In the workshops, people often work with the same word or concept in pairs or small groups.

Even though the popularized concept of NSM is called '65 words', it is emphasized that there need not be exactly 65 words in the list. More precisely, there are 65 universal concepts, which in different languages can be presented by different numbers of words, for example, English *I/me* has two forms. We have also told how the NSM research is in continuous progress, and even if there may be some primes still coming or going, the total number of primes will most likely stay well under 100.

Remarks on Terminology In the beginning of the popularizing process, there were especially two terms we had to carefully think about. The first of the terms, English *prime*, had been under consideration for some years already, related to a linguistic manuscript written in the Finnish language (Vanhatalo and Tisssari Ms). In this manuscript, the authors searched for a transparent Finnish word, and ended up with the term *alkusana*, constructed from *alku* 'start, beginning' and *sana* 'word'. Other candidates were also considered, such as *ydinsana* 'core word', *perussana* 'basic word', *praimi*, or *primitiivi*.

The term recalls the existing words *alkuaine* 'chemical element', made from *alku* and *aine* 'material', and *alkuluku* 'prime number', made from

alku and *luku* 'number'. A connection to chemical elements is often made when introducing the concept of primary words: just as all material objects can be deconstructed into chemical elements, also all word meanings can be deconstructed into primary words, the universal conceptual elements of human thinking.[3]

After we were convinced that *alkusana* 'prime' is the best possible key term, we still needed a brand name, something like the *Natural Semantic Metalanguage* in linguistics. This official academic name was quickly ruled out as too complicated, long, and cryptic, the Finnish translation of it sounding no better. We tried the term *alkusanateoria* 'theory of primes' as well, but the word *theory* in the name wasn't too attractive. Maybe also *Minimal Finnish*—but we wanted to keep it fully universal. Would Minimal English or Minimal Estonian have been something different? Finally, the brand name *65 sanaa* '65 words' came from journalist Jaakko Lyytinen, who was among the first visitors to the semifinished webpage. 'The number of the primes is the minimum you have to talk with anyway, people will remember this', argued Lyytinen (p.c. February 2016). He was very correct, as we were able to see later.

We also wanted to keep the theory name 'Natural Semantic Metalanguage' in its original English form, without translating it into Finnish. This was to make sure that whoever is interested in the background of the 65 words would immediately find links to the NSM community.

To conclude, the modifications reported in Sect. 2 were made to make the system easier and more approachable. The target audience of the 65 words method consists of educated Finnish people with no or little background in semantics, theoretical linguistics, or other language studies. Some of the modifications can be considered as Finnish specific, while the process as whole would be applicable to other languages as well.

10.3 Case Studies from the Finnish Media

Before the term *65 sanaa* was invented in early 2016, information about the NSM application was spread by JT and UV in person, in workshops, seminars, university lectures, and personal discussions. After the webpage

www.65sanaa.fi was published, interested people, including journalists, have been able to study the method by themselves and to focus on questions they find most relevant. In many cases, the journalists begin with some independent study and later contact JT or UV for an interview.

In the remainder of this section, we report seven cases from the Finnish media on how the 65 words method has been presented to public audience.

Case 1 In March 2016, the newspaper *Helsingin Sanomat* was reporting widely on the large-scale societal reforms underway in Finland. The contract related to the reform included complex political jargon, starting from its name *yhteiskuntasopimus*, English 'social contract', which was changed to *kilpailukykysopimus*, English 'competitiveness pact'. The complex terminology being used in the negotiations and contracts was questioned by public and media.

In this context, *Helsingin Sanomat* wanted to get a commentary from JT, who passed the request to UV as well. The commentary was published online on 14 March 2016, on the first page, the next to the main news article (Rissanen 2016). The title and the lead of the article were, as translated from Finnish: 'Theory: All things in the world can be explained with 65 words—this is how the theory opens Finnish politics. – According to a researcher, politicians often explain their difficult terminology with other difficult words, which leads to circular definitions'.

The article starts with introducing the NSM theory and UV and JT and continues with comments on political jargon. The 65 words method is used for decomposing words *kilpailukyky* 'competitiveness' and *sopimus* 'contract, pact'. UV and JT also suggested how the different parties could explain their thought; for example, the government could say 'the labor union doesn't know that if we do as they want, maybe after a short time they will feel good, but after a longer time very bad things will happen to all of us'.

The *Helsingin Sanomat* article is an enlightening example of how journalists with presumably no background in lexical semantics were able to quickly catch onto a previously unknown scientific method and use it for explaining an actual phenomenon in society. The whole process from the first phone calls to publishing the article took less than 24 hours. For

evidentiary purposes, we have attached an English translation of the article in Appendix 1.

Case 2 Later the same day, 14 March 2016, a well-known Finnish media and business person Jari Sarasvuo discussed the 65 words in his weekly radio program on Finland's national public broadcasting company YLE (*Yleisradio*). Sarasvuo's main message was how the 65 words can be used to build confidence between people from different areas in society. 'The idea is that confidence can be generated by talking on difficult issues so that both certainly understand the same thing in the same way. And that the commitment generated from the discussion will last', he said in the talk (Sarasvuo 2016). He called the 65 words a common treasure of mankind. Even though Sarasvuo didn't mention the name Natural Semantic Metalanguage, he told his listeners that 'they have been studying this in Australia for decades'. The program is still available online at YLE website. As of August 2016, it had 11,791 listeners.

Case 3 In 26 February 2016, *Nykypäivä*, a monthly magazine of the Finnish National Coalition Party (a liberal and conservative party, one of the four biggest parties in Finland) published a wide-ranging article on political rhetoric (Luukkonen 2016a). In the middle of the other headlines on the magazine cover, there is a headline reporting *Alkusanaa et ymmärrä väärin* 'you cannot misunderstand a primitive word'.

Attached to a larger article about four outstanding speakers among Finnish politicians, there is a smaller article titled *Alkusanat. Puhu selvemmin* 'primitive words, talk more clearly' (Luukkonen 2016b). The article includes an interview with UV, and it is illustrated by four words in capitals, MINÄ 'I', HYVÄ 'good', ISO 'big', and PAHA 'bad'.

The article starts with questions on understanding. 'If you want to talk so that people surely understand, I recommend using the primitive words', UV says. The article reported how the primary words represent the core of human understanding. According to studies, it seems that all people can understand the words in a similar way. Primary words are suggested for figuring out 'What do I actually want? And how do I think that would happen? What would I do?'

Case 4 In spring 2016, there were several public discussions on the concept of *anteeksi* 'forgiveness, apology, sorry', related to recent political and economic issues in Finland. On 9 June 2016, a weekly newspaper *Kotimaa*, the third largest Christian-societal media in Finland, published JT's essay on 'forgiveness' (Torkki 2016). The essay was titled as *Miten pyytää pirahalta anteeksi* ('how to ask forgiveness in Piraha') and illustrated with three photos of Finnish politicians and business people, Lenita Toivakka, Alexander Stubb, and Olli-Pekka Kallasvuo.

The essay starts with reporting Dan Everett's experiences with Pirahã people, focusing on the fact that there are no specific words for apologizing or asking for forgiveness in the Pirahã language. 'How would you explain what *anteeksi* 'forgiveness, apology' means for someone who doesn't have that word in his/her mother tongue?', asks JT and provides an explanation: 'I know that I have done something bad. I'm feeling bad because of this. If I can do something good for those that I did the bad, I want to do it. I don't want to do the bad I did anymore'. JT recommends this as a check list for political apologies. If some of the crucial elements are lacking, the apology may be insincere.

Another case is when a child says *anteeksi* to a parent or man to God, continues JT. Then the meaning of the words should be explained to Pirahã like this: 'Don't see the bad I did. See me'.

Case 5 On 11 August 2016, the Finnish media house *YLE*, also quoted in case 4, reported a budget talk by Finnish Finance minister Petteri Orpo. The report was followed by a commentary article (Parkkinen 2016), interviewing three specialists on rhetoric and word usage, one of whom was UV. He analyzes the word usage of minister Orpo based on the NSM approach to vocabulary, even though the article doesn't explicitly mention *alkusanat* 'primitive words' or NSM. UV explains how Orpo uses abstract words such as *budjetti* 'budget' or *verokiila* 'tax wedge', and this illustrates how he as a politician observes the complex societal system from outside. People living in the society may notice the same phenomena, but they talk about you and me, money and bills. Should Orpo like to address his speech

to public audience instead of officials, political jargon should be removed, states UV.

Case 6 In spring 2016, *Diakonia*, a magazine focusing on social work done by the Finnish Lutheran Church and published by several related organizations, invited JT to write an article on issues concerning the language used by the church. The article, written by JT and UV after the Brussels terror attacks in March 2016, focuses on words as a hyper dangerous weapon available to anyone who wishes to pick a fight (Torkki and Vanhatalo 2016). Starting with an analogy about a bomb disposal team approaching a suspicious bag, the article suggests that suspicious words as well should be approached and dismantled by a word disposal method. The article further explains how people use words for interpreting and naming thoughts and feelings of each other. It focuses on the Finnish word *viha*, often considered to be the ultimate feeling behind the terror attacks, and then points out how an Arabic-speaking terrorist would never call his own feelings by that word. Instead, he might use words like *jihad*. Yet the outcome from both *viha* and *jihad* can be the same: a person does something causing another person to die.

To understand and analyze the processes and prevent new atrocities, the article continues, we should be able dismantle the emotional and conceptual constructions behind behavior. Use of other complex abstract culture-dependent words will not lead to success; instead, the dismantling has to be done simply, as simply as possible. The article also includes some examples analyzed using the 65 words.

Case 7 In February 2016, *Aikamerkki*, a web magazine of the Workers' Educational Association of Finland published an interview with UV, with a title translated into English as '65 words are enough for understanding' (Juntumaa 2016).

Besides explaining UV's interest and work on lexical semantics, the article considers the individual right to define the words s/he is being described or defined by. 'Who can say you are in crisis or having stress?' The right to define word meanings is held collectively by the community,

not by the authorities, notes UV. At least the definition processes should be made transparent. People should be conscious of how word meanings are subject to molding, and how meaning molding can be used for various purposes.

10.4 Other Reactions in Finnish Society

In addition to the media cases reported in Sect. 3, there have been plenty of other reactions and signals worth noting. In reporting these reactions, we have been informed by a number of personal blogs and discussions concerning the method.

10.4.1 Universities

A special course of linguistics *Kulttuuriset skriptit ja kulttuuriset avainsanat: näkökulmia pragmatiikkaan* ('Cultural scripts and cultural key words: views on pragmatics')[4] was held by UV at the University of Tampere in autumn 2014. There were 24 students actively participating in the course. Three versions of NSM were introduced to the students, the original English-based NSM, the conventional Finnish-based NSM, and the popularized NSM version. Some of the students chose to write a final course assignment focusing on some cultural key word or script and practising the popularized version of NSM. Partly as a result, an MA thesis on Finnish NSM in a second language teaching is now underway at the University of Tampere.

There have been several expressions of interest from the field of teaching Finnish as a second language. Some Finnish as a second language teachers have reported they have used the 65 words method at their classrooms and requested more tailored teaching materials. At the Jyväskylä University, there has been interest in making the 65 words available to illiterate immigrants at their early stage of learning Finnish. In practice, this would mean making video materials about the 65 words.

Among the earliest workshops popularizing the NSM approach in Finland, there was a seminar *Sanat työssä* ('words in work'), organized by

Palmenia Centre for Continuing Education of the University of Helsinki and addressed to authors and literary art teachers in September 2014. UV's talk at the workshop was titled as *How to say what you really think. Natural Semantic Metalanguage decomposing nets of words*.[5]

There have been two section presentations focusing on the NSM at the *Kielitieteen päivät* (the Finnish Conference of Linguistics). The first mainly introduced the conventional Finnish-based NSM (Vanhatalo and Tissari 2014), while the second (Vanhatalo and Konstenius 2015) focused on a new study plan, applying NSM to pediatric psychiatry. The objective of the study plan was to compare Cohen's Perceived Stress Scale[6] to NSM-based stress scale. Funding applications for studying NSM-based applications to psychiatry (a stress study), psychology (a depression study), and sociology (a loneliness study) was submitted, yet not granted.[7]

A large cross-disciplinary research project named *Suomalaisten yksinäisyys* ('the Loneliness of the Finns'), involving nonacademic organizations as well, has organized workshops and seminars on loneliness. In November 2015, UV gave a presentation titled *Tunteet sanoiksi. Subjektiivisen kokemuksen määrittely ja arviointi* ('From emotions to words. Defining and assessing subjective experience'), focusing on vague vocabulary used in sociological studies and suggesting NSM as a more reliable tool for studying subjective experience such as 'loneliness'.[8] The talk raised lively discussion and interest, especially among people working with elderly people and immigrants.

10.4.2 Church

Another field expressing interest has been religion, more specifically the Finnish Lutheran Church which plays a major role in Finnish society. JT, having a theological background himself, has been presenting the method to pastors and teachers at the church workshops, focusing on how complex yet crucial concepts of Christian faith could be analyzed and opened for a secularized audience. UV has presented the method for Sunday school teachers.

Interestingly, we were contacted by a Finnish pastor Stiven Naatus (p.c. May 2016), who has studied the method from the website and prac-

ticed it at his own workplace in a workshop with 12 people. He had also given the participants a pre-workshop assignment to get familiar with method on the website and compose a one-sentence prayer with the 65 words. The participants in the workshop, he reported, were delighted by the results.

10.4.3 Other Public Institutions

One of the most promising partners for the 65 words method is Selkokeskus[9] ('the Finnish Center for Easy to Read'), which has been very interested in using NSM applications to answer the needs of people with linguistic troubles (disabled people, people with memory disorders, and immigrants). The 65 words method has been briefly introduced to the advisory board of the Selkokeskus; there was also a presentation *Alkusanat ja selkokieli* ('the primary words and the easy to read') by UV during a training day for Easy to Read specialists in August 2016.

Several Finnish logopedics (speech therapists) have expressed their interest in the 65 words method, reporting discussions on possibilities of using it in immigrant speech therapy. UV has been invited to give a talk on the topic at the conference *Puheen ja kielen päivät* ('the days of speech and language') in March 2017.[10]

The few public reactions from within the field of linguistics have also been surprisingly positive. *Kotus*, the center for languages spoken in Finland, published an online interview with UV (Heikkinen 2016) in a regular column. The 65 words webpage was mentioned as the reason for the story. There has also been an online article on the University of Helsinki webpages, related to cooperation with *Selkokeskus* and the language departments of the university, also mentioning the work with 65 words webpage (Aarinen 2016).

10.4.4 Business

The method has raised interest also in the business world. Finnish companies Seedi Solutions Agency and Havain Digital Sales and Presentation Design Services contacted JT and UV in spring 2016, expressing desire

for cooperation. According to the representatives of the companies, methods that work with complex business jargon are much needed. As a concrete outcome of the cooperation, there was a blog on the topic (Sorri 2016) at the webpage of the society of *Myynnin ja markkinoinnin ammattilaiset Pohjanmaa* ('Society of sale and marketing Ostrobothnia'). Sorri tells how he, after been wondering why companies use complex vocabulary when trying to reach their customers, has come up with the 65 words method. The Havain people also invited UV to give a presentation at a business seminar 'Master the Art of Presenting', focusing on good presentation skills in October 2016.[11] The title of UV's talk was *65 words that make you think and speak better*. This invitation is noteworthy because of the notable reimbursement for the task provided. Besides the incentive, an improved second version of the starter kit of the 65 words was created by personnel in the Havain company (see Sect. 2.3).

Taken together, we have been replying positively to all requests regarding the 65 words method. We have not been active advertising it; instead, we have been open to talking about the method to anyone interested. JT's public role in the field of rhetoric and clear communication has been a great help with introducing the 65 method, as he has drawn attention to it whenever appropriate. Yet Finnish journalists and specialists on various fields have independently worked through the NSM basics.

The call for research-based knowledge on the area of vocabulary has been striking. There is strong confidence in science in Finnish society, and people are keen on learning how results from research could benefit their work and life.

In summary, the instances reported in Sects. 3 and 4 show that the method has gained both public and private positive interest. It has been picked up by a couple of the largest Finnish media houses *Helsingin Sanomat* and *Yle*, plus a number of smaller operators. There has been cooperation with *Selkokeskus*, and *Kotus* has shown positive attitude. Hundreds of people have familiarized themselves with the Natural Semantic Metalanguage, and based on web statistics, thousands have been reading or hearing about it. JT and UV have been involved with a number of presentations, workshops, and unofficial discussions.

10.5 Some Guidelines for Introducing the 65 Words to Public Audience

Based on our experiences, we are suggesting some guidelines to being considered when introducing the 65 words method.

Be Quick, Compact, and Focused When introducing NSM to potential nonlinguist users, it's important that the system be adoptable within a few minutes. If it takes more than 10 minutes to get the idea grasped, many people lose interest. The one-page starter kit tries to achieve the wow effect: It reveals the secret of magic words, the all-in-one tool you can use everywhere. Additional information will be provided as questions arise, not before. This kind of approach is in line with current pedagogical trends: you first learn a bit of something in practice and get your hands-on experience. By doing more you may start thinking more and asking for theoretical knowledge. However, you're not spoiled with theory earlier, at the stage when you couldn't care less about it.

Related to compactness, it's important to set the starting angle right. It may be the financial outcome caused by problems in communication (for business people), the vagueness of words used in scales or questionnaires (for researchers in social sciences), a groundbreaking invention in linguistics (for a newspaper headline), a story of young Anna Wierzbicka moving to Australia (for school children), or a linguistic theory (for linguists only).

Be Visual Enough attention should be paid to visual presentation. People are more likely to get keen on colorful advertisement style made with nice layout and possibly illustrated, rather than just reading a plain list of words. It's important to note that even if the primes themselves are intuitively clear to people regardless of any background in linguistics, the categorization of primes has made by professionals for professionals. What the public audience needs, however, is an intuitively sound and approachable picture of words. The way the primes are introduced may also depend on the cultural and educational environment. Animations or even video guides might work best for many people, let alone nonliterate students in a second language learning context.

Choose the Right Argument for Each Audience The heterogeneity of the public audience must be taken into consideration. People with large variety of needs and backgrounds are interested in simple communication and clear thinking. Yet they are mainly interested in their own case only. Someone with business interest couldn't care less about how the 65 words can benefit immigrant children in speech therapy, and the other way around.

Before meeting with your audience, try to figure out its specific needs and focus on those. Try to find out what problems your audience is really facing, and present the 65 words-based solutions to them. Think carefully to find the cutting edge for this specific audience and find samples and stories to emphasize it. Don't cover other fields of use, don't go over unnecessary arguments.

This may become a challenge when introducing 65 words on a webpage, available to any people with any kind of needs. Even there, specific advertisement, arguments, samples, and pages could be tailored for different audiences.

Explain the Primes—And Nonprimes In guidebooks or webpages, each semantic prime in the set of 65 words could have a short popular introduction and reasoning. 'KNOW is one of the key verbs in human cognition…' Just a few introductory sentences per prime would be enough to satisfy one's initial curiosity. Possibly even more important, some attention should also be paid for explaining why some quite obvious and necessary words are *not* primes. The most frequent comment in the 65 words workshops in Finland is 'There are some essential words missing in the set'. A list of some tens of the most wanted missing words could be listed, provided with short explanation, preferably with illustrative examples like 'One could imagine the word *and* being a prime. But no, there are languages such as X and Y with no concept of "and"'.

It's also worth of noticing that some concepts may exist in (nearly) all languages, but they can be explicated using the primes, and because of this they are not included in the list.

Consider the Role of Grammar Instructions The guidelines for using grammar may vary according to the purpose for using the 65 words. If the 65 words text is going to be translated into other languages, more precision is needed in the grammar. If there is no need for translation, the elegance of the production can be the main focus and the grammar can be more flexible.

'Molecules Rule, OK' There are certainly words that exist in a certain wide, even vague, cultural environment (e.g. the EU area) and have relatively low level of semantic complexity, for example, 'money' or 'work'. Pointing them out and allowing people to use them along with primes means putting pragmatism over dogmatism. For people with a theoretical interest in language, getting familiar with the concept of semantic molecules would help to grasp the idea (see Chap. 3, this volume).

Make FAQs There are popular questions that often seem to arise and that would deserve commenting in a form of FAQ. Many of them have been addressed on the Finnish the 65 words webpage (see Sect. 2.2); however, more could be collected.

Think Out of the NSM Box As a specialist of word meaning, try to adopt lay people's view to communication. Be honest to what you see, and be open to the naïve questions made by lay people. For example, not all 'normal' vocabulary always causes problems. The majority of the words actually work relatively well in communication. People living or working in the same environment do usually understand each other well enough, especially if they wish to do so. Emphasizing the unique nature and fundamental culture dependence of every single word besides primes may not accord with people's observations of everyday communication and may instead set the usefulness of NSM applications under suspicion. Also remember that it is not necessarily just language and culture barriers that prevent people from understanding. People communicating in the same native tongue may conceive word meaning differently and benefit from the use of semantic primes.

Be Open and Generous Results from the academic NSM research have been open data; likewise, the applications should be open to everyone. In the case of the Finnish 65 words, we have revealed all our secrets at the webpage. We have done plenty of work without getting paid by anyone. Yet there may be seen some options for getting reasonable reimbursement, as the sample of Havain presentation company shows (see 4.4). Consulting work in the business field may even result in funding for further academic research.

10.6 Discussion

In Sects. 2, 3, 4, and 5, we have painted a picture of what has happened in Finland in the 7 months between late February and autumn 2016. We published online a popularized version of the Finnish-based NSM, and now we have reported on its reception as it has come to our knowledge. As an outcome of our experiences, we have provided some guidelines for the linguistic community who wish to bring NSM-based applications to public notice.

In this closing discussion, we wish to share some risks and benefits to be considered when implementing NSM outside of academic linguistics. Considering how NSM as a method for semantic analysis has been taught at universities and practised by specialized professionals only, one could ask whether there may be any risks if the public starts using the method without any guidance or control by the NSM research community. The first possible risk is perhaps the usability of the method: Is the method, even in an applied form, truly simple enough for public audience? There are few research studies on this topic, yet the results are in line with our experiences. People with little or no linguistic background are easily able to catch the idea of primes and operate with them (Gladkova et al. 2015).

A second possible risk could be related to misuse of the method. In practice, this would mean that people start using NSM in unorthodox ways, for example, mixing up primes and nonprimes or using inappropriate grammatical constructions. In the context of the historical-ideological background of NSM, however, 'misuse' of the method can be seen in a

new light. Immigrants and other people crossing languages and cultures have been the ultimate beneficiaries of Wierzbickian philosophy. Considering human communication in general, any results from linguistic research that help people to live peacefully together would be valuable. It is not always the case that a professional researcher is needed to point out the problems in vocabulary and provide solutions. Making the public widely aware of the importance of the lexicon will help people themselves analyze problematic situations in everyday communication.

For the majority of people, there is no need for a perfectly adapted semantic tool. Rather what is needed is understanding that not all words are alike. Simply understanding something about the common words of humankind may help people on the way to better communication. In the same way, understanding something about the complexity and vagueness of normal vocabulary may radically help people on the way to clearer thinking and better speaking. In both cases, the result gained with even a partially mastered 65 words method is always better than the original battle with normal words.

The vague use of NSM is actually not limited to nonprofessionals only. If one looks at the explications published since 1970, there can be seen various ways of applying the method. Furthermore, it is not guaranteed that all the revisions of the original tool (the selection of primes and the grammar) or modifications of the theory have been valid improvements, even though the revisions have been made by the originators themselves.

A question of misuse can also be addressed to the authors of this text, JT and UV. Even though NSM as a linguistic approach does not have copyright, is it really appropriate to squeeze the method as anyone pleases? It is very clear that NSM as a semantic approach was founded by Anna Wierzbicka and further developed by Cliff Goddard and others. The originators have also had their say in its developments. The applications, however, can be more or less tightly based on the original research. One reason for choosing the brand name '65 words' instead of NSM something, or even Minimal Finnish, was to keep things separated. The '65 words' method is clearly an application, based on but not identical to NSM.

Related to the question of copyright, let us play a bit. If we take the theory of common words of humankind as granted, it was just a question of time when, where, and by whom the semantic primes would come to be discovered. The time was not ripe for Plato (1999) in *Kratylos*, for Locke (1690), or for Schopenhauer (1977[1815]). The moment was for Wierzbicka (1972). The primes were finally found, not actually invented.

Yet NSM seems to be such a strong theory that it bears some misuse, whatever direction it comes. The method has been developed and refined for more than 40 years. Now that it has been taken out of the academy, will the system stand? Sooner or later this has to be tried. The public audience is probably the most challenging, yet the most fruitful, test field for the method.

Summing up, the theory of universal units of thinking is still a theory. As any theory, it can also be falsified one day. Based on our experiences reported in this chapter, however, we can be pretty sure that the use of NSM-based practical applications will increase in various areas of society in the future. The applications are too powerful tools to stay hidden in academia. We are very much looking forward to what happens after 5 or 10 years.

10.7 Conclusion

Politics, second language learning, easy to read texts, religion, sociology, business presentations—what else is needed to prove the usefulness of NSM applications for the public audience? We may never know perfectly or certainly what words mean. However, with the NSM applications, we'll be able to negotiate word meaning, open our own thinking, and maybe reach the thinking of others.

Making the world a better place to live has been motivating Anna Wierzbicka since the early 1970s. We the authors of this chapter share this mission. The task is highly ethical, highly challenging, and highly entertaining. Our sincere wish is to do our best and to continue the work in Finnish society.

Appendix 1: Translation of the Finnish Article in *Helsingin Sanomat* 14.3.2016. Available Online http://www.hs.fi/politiikka/a1457922654693

Theory: All things in the world can be explained with 65 words—this is how the theory opens Finnish politics. According to a researcher, politicians often explain their difficult terminology with other difficult words, which leads to circular definitions.

Even all abstract things, such as the *competitiveness pact* and other terms used by the Finnish politicians, can be explained by ca. 65 words, according to the mini-language theory.

Linguistic theory on Natural Semantic Language is based on the common core all languages have. With the help of primitive words, everything should be globally understandable.

In Finland, speech trainer Juhana Torkki and linguist Ulla Vanhatalo have set up a Finnish website in order to open the theory. Vanhatalo has a Ph.D. on synonymy, and she has done research on the mini-language theory in Australia. Now she is popularizing the method.

'It is clear that in politics, for example, difficult words are used. Things are complicated, and it is reflected in the words. The problem is that the meanings are not disclosed', Vanhatalo explains.

According to her, politicians often explain their terms by other difficult words, which end up with circular definitions.

'The interpretations are arbitrary, because no one knows what is being hunted'.

In politics, a word used by another party can often not be accepted; people rather come up with their own counter word. The primary words reach to the roots of things, but it is required that people really want to understand the other point of view.

'The purpose of language is communication, but perhaps an even more important feature is that language can be used to mask the real thoughts, feelings and desires. Playing around with words can be fun and clever, but it will not take things forward', Vanhatalo concludes.

How could the method then explain the Finnish political debate? Here Torkki and Vanhatalo disclose the concept of *competitiveness pact* and the related terms in the language of 65 words.

Competitiveness: Finland wants to be better than the others. If we now do more work, or what other people want, after some time, we can do more of what we want.

Pact/Contract: Now all can say how they want this to be done. All say what they do that this happens.

When a compound word is dismantled into two parts, it still seems that all parties have the same opinion on this matter.

But it feels that there is deep distrust in the Finnish political debate.

'Often the core of the lack of confidence is that each party thinks that the other one does not understand something. These structures can be opened by the primary word language', Vanhatalo and Torkki explain.

They suggest how the parties could disclose their thoughts into words.

The labor union people think: The government does not know that many people already now have very few good things. If they have even less, they cannot live as people live.

The government thinks: The labor union people do not know that if we do what they want, maybe after a short time, it feels good, but after a longer time, very bad things happen to all people.

And why does the government talk about *contracts* or *pacts*, opposition about *mandatory legislation*?

Perhaps the opposition experiences that the government is saying like this: If all do not say what they want to do, then we say, what will be done. We do not want anymore to hear what you say. After that, you can think what you want.

'Should we close the sipiläs, lylys and selins[12] one more time in the conference room—so that everyone should tell their goals by the language of 65 words', Juhana Torkki suggests.

Notes

1. https://www.griffith.edu.au/humanities-languages/school-humanities-languages-social-science/research/natural-semantic-metalanguage-homepage.
2. Strictly speaking, third singular pronouns like Finnish *hän* mean 'this someone', rather than simply 'someone', but even the Finnish academic version of NSM, an exception has been made compared with the other language-based versions, and SOMEONE is listed with *hän* and *ihminen* as allolexes.

3. This analogy is usually followed by a philosophical note on the "unreachability" of human cognition. Unlike in chemistry, in linguistics, or cognitive science, we are not able to know with exact certainty what happens in a human mind. We remind our audience that NSM is a theory and will remain a theory, subject to improvements, and falsifiable like any theory. What we do know, though, is that the 65 words method driven from that theory provides extremely interesting and promising results on various areas of human life. One can buy the method without buying the (whole) theory.
4. https://www10.uta.fi/opas/opetusohjelma/marjapuuro.htm?id=28001.
5. http://blogs.helsinki.fi/sanataide/esimerkkisivu/.
6. https://www.mindgarden.com/documents/PerceivedStressScale.pdf.
7. Apart from the applied studies, there is an ongoing research project on the Finnish word *viha*, funded by the University of Stockholm and led by Heli Tissari, accompanied by UV and Mari Siiroinen.
8. http://www.uef.fi/documents/128231/129484/Vanhatalo/ea0eb793-658d-4f93-ad22-c61fe72ed89f.
9. Selkokeskus, The Finnish Centre for Easy to read, http://papunet.net/selkokeskus/in-english/.
10. http://www.puhejakieli.fi/pktp_2016.html.
11. http://master-presenting.com/.
12. Names of the Finnish politicians and labor union leaders: Juha Sipilä, Lauri Lyly, Ann Selin.

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11

Narrative Medicine Across Languages and Cultures: Using Minimal English for Increased Comparability of Patients' Narratives

Bert Peeters and Maria Giulia Marini

Narrative medicine is an approach to medical scholarship that seeks to broaden the quality of care, going well beyond what conventional evidence-based medicine, with its single metric scales and numbers, can offer. The aim is to provide individual patients with enhanced care, drawing on perspectives and experience from the medical humanities. The chapter expounds on the importance of effective communication with patients and in particular on the value of structured, ordinary language, narratives intended to help patients verbalize their experience. The authors tell the story of an emerging collaboration between practitioners of narrative medicine and advocates of Minimal English and report on an international pilot study bringing Minimal English (and its counterparts in a sample of other languages) to bear on the tools used for data collection in narrative medicine.

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11.1 Introduction

The approach to medical scholarship known since 2001 as "narrative medicine" seeks to broaden the quality of care by moving beyond conventional evidence-based medicine, which focuses on population *samples* rather than on individuals, thereby neglecting the individual, biological, social, psychological, and ontological diversity of patients. Answers in a recent survey of UK-based medical doctors who were asked whether they were currently using evidence-based medicine were almost evenly split: 51% answered positively and 49% negatively, showing that evidence-based medicine has serious limits since it does not consider patients in their wholeness but tends to focus on the disease (Greenhalgh 2014). This is where practitioners of narrative medicine feel they have a contribution to make: they argue with steadily increasing success that narrative medicine is in a position to offer complementary competence and additional tools for patient care.

This chapter documents some of the recent and ongoing efforts made within one particular brand of narrative medicine, namely, the one practised by Maria Giulia Marini and her research team at the Fondazione ISTUD, an independent business school in Italy whose main expertise is in humanities and its contribution to management studies. ISTUD's research group in the healthcare area is based in Milan, where Marini is a tenured professor of medical humanities at Hunimed, a private university dedicated to providing quality training in the medical sciences. The research Marini and her colleagues are carrying out at ISTUD involves collecting and analyzing patient narratives to better understand the recurrences and individual differences in patients living with a particular disease, not only within but also beyond linguistic and cultural boundaries.

What ISTUD-style narrative medicine seeks to achieve and how it sets out to do this is the topic of Sect. 11.2, which also places ISTUD-style narrative medicine in the broader context of narrative medicine and evidence-based medicine globally, pointing out some of the differences along the way. Sections 11.3 and 11.4 underscore the importance of effective communication between medical personnel and patients, insisting above all on the merits of structured, ordinary language, narra-

tives using scripts, interview prompts, and the like, to collect stories from patients that are more comprehensive and at the same time easier to compare. Section 11.5 tells the story of an exciting new development involving collaboration with advocates of Minimal English. Section 11.6 presents the aims of an international pilot study bringing Minimal English and its counterparts in a sample of other languages to bear on the tools (scripts, interview prompts, etc.) used for data collection in narrative medicine. The chapter concludes with Sect. 11.7.

11.2 Narrative Medicine: An Overview

In its pursuit of improved patient care and other medical educational goals, narrative medicine draws on the *medical humanities*, an interdisciplinary field that brings together perspectives from a variety of humanities disciplines, especially those that pay particular attention to human testimony and subjective experience and more generally to those "aspects of life and welfare which medicine may be less good at recognizing" (Hurwitz and Dakin 2009: 84). Some social sciences, especially anthropology, are also represented. The medical humanities have been an integral part of the humanities, even before there was a name for the field.[1] Existential questions concerning life and death, illness and wellbeing, and birth and aging, in particular, have long exercised the minds of humanities scholars. For ages, they have asked and answered such questions to the best of their abilities, often displaying an attitude inspired by ethical values such as assistance, compassion, and empathy (as argued in the preface to Marini [2016]).

As a form of *applied* medical humanities, narrative medicine seeks to make a positive change to medical practice by bringing the medical humanities to bear on it. In the preface of her 2006 book *Narrative Medicine: Honoring the Stories of Illness*, Rita Charon recalls how, 5 years earlier, the phrase *narrative medicine* had come to her as "a unifying designation to signify a clinical practice informed by the theory and practice of reading, writing, telling, and receiving of stories" (Charon 2006: viii). She had first used it in 2001, in a paper called "Narrative medicine: form, function, and ethics" (Charon 2001a), then in another paper titled

"Narrative medicine: a model for empathy, reflection, profession, and trust" (Charon 2001b). Both papers broached a topic she had already addressed in earlier work (e.g. Charon 1993). It is Charon's term that has been widely adopted, rather than Greenhalgh and Hurwitz's (1998) label *narrative-based medicine*, a direct reference to what was, and still is, known as *evidence-based medicine* (sometimes abbreviated to EBM). The last chapter of Greenhalgh and Hurwitz (1998) was subsequently adapted and reprinted in the *British Medical Journal* under its original title "Narrative based medicine in an evidence based world" (Greenhalgh 1999). In it, the author deplored the relative neglect of patient narratives in medicine as it was practiced at the time and called, much like Charon's earlier and later work, for a rethink, emphasizing not only the role patients can play in their own healing by verbalizing their thoughts and feelings but also the need for doctors and other health carers to take this information into account.

Charon and Greenhalgh have each formed important research and teaching clusters in narrative medicine, Charon at Columbia University New York and Greenhalgh at University College London. In recent years, these two clusters have been complemented by comparable teams in other parts of North America and the UK, as well as in various other (mainly European) countries, including Germany, France, and above all Italy. German researchers (e.g. Kalitzkus et al. 2009) talk about *narrative Medizin*, their French colleagues (e.g. Goupy et al. 2013) about *médecine narrative*, and scholars in Italy (e.g. Bert 2007) use the term *medicina narrativa*. Charon's (2006) groundbreaking work has been translated into French (2015) and Japanese (2011), and a new book (Charron and DasGupta 2016) has just been published.

Within continental Europe, one of the most visible research and teaching clusters has formed around Maria Giulia Marini, in Italy. Marini's career path is not unlike that of Charon and Greenhalgh, who were originally trained in the humanities, then chose to pursue a medical career, putting to the best possible use the experience gained through their study of the humanities. Marini, too, started in the humanities, then turned to epidemiology. However, her approach, and that of her team, is unlike that of the others. UK researchers tend to focus on published testimonies such as diaries, autobiographies, letters, and illness narratives. Elsewhere,

the narrative data that are used are also written, but they are mostly collected through daily clinical practice. In the USA, for instance, the focus is on transcribed patients' accounts of hospital stays or visits to a GP's consulting rooms, sometimes compared to the notes made by GPs on a patient's file or, in a hospital setting, by surgeons (and by carers more generally) on a so-called parallel chart. The latter is Charon's term for a parallel record to the clinical chart, on which physicians and carers can write their own thoughts, emotions, projects, and wishes, as well as the patient's projects and wishes, none of which can be written on the institutional case record. The general idea is that writing activates and stimulates reflective thinking, which is thought to be conducive to an accelerated healing process.

Many Italian researchers reproduce either the US approach or the UK approach, but—as mentioned previously—the approach taken within ISTUD is different: the team of researchers led by Marini also works on patients' transcripts, but focuses on semi-directed accounts (a "storyline" to be completed) rather than on accounts that are free-flowing. The idea is to pinpoint commonalities in the narratives, so that the aim shared by all practitioners of narrative medicine, namely, to improve the public and private healthcare system and to make it more affordable, can be achieved sooner.

The focus on the search for commonalities, using structured narratives that adopt a chronological approach (see Sect. 11.4), is characteristic of ISTUD-style narrative medicine. As recently as 2016, it was officially endorsed in a document (Greenhalgh 2016) compiled for the World Health Organization's regional office for Europe (WHO Europe). Brian Hurwitz, director of the Centre for Humanities and Health at King's College, London, and Maria Giulia Marini acted as external peer reviewers for the document, which is titled *Cultural contexts of health: the use of narrative research in the health sector*. The document is of strategic importance since, in a first for the world's top health body, it puts narrative medicine at the same level as evidence-based medicine. As the title suggests, the document focuses on the importance of culture in the health sector: each patient is embedded in his or her own cultural context, which needs to be taken into account. Individual patients must have the opportunity to "tell their story"; their medical history alone does not

provide all the information needed to enable caregivers to provide patients with adequate care.

The ultimate aim of narrative medicine is not to replace evidence-based medicine, but to *supplement* it, with resulting benefits for both sides. For the time being, the relationship remains rather rocky, but specialists of narrative medicine (e.g. Marini 2016) believe that evidence-based medicine and narrative medicine will eventually be able to live together as a harmonious couple, with narrative medicine's narratives lending increased credibility to evidence-based medicine's statistics and providing their own quantifiable evidence. It is indeed misguided to believe that only evidence-based medicine works with "real data". Narrative medicine works with real data of a different kind, referring to patient lives in a broader context, not the kind of evidence (clinical research, lab tests, results of treatments, etc.) evidence-based medicine has traditionally focused on. Within narrative medicine, the focus is on narrative, that is, how patients talk about their illness and their health, how they react to a poor diagnosis, how they learn to cope with their illness, what they feel, and how they view the therapeutic approach, including procedures, drugs, visits, and surgery. The belief is that analyzing how patients talk about their illness can provide a different kind of evidence that may be used to improve healthcare.

11.3 Effective Communication Enhances Healthcare

In their "Mission and Vision" statement, the editors of *The Intima*, an e-journal of narrative medicine[2] created in 2010 by students of Rita Charon's enrolled in the Narrative Medicine Master's program at Columbia University, define the field as "an interdisciplinary field that enhances healthcare through the *effective communication and understanding* between caregivers and patients" (italics added).

What does it take for "communication and understanding" in the interdisciplinary field of narrative medicine to be "effective"? In what follows, we answer that question with reference to communication alone—or rather, we subordinate understanding to communication. To

talk about "effective communication and understanding" is indeed pleonastic: there is no communication if there is no understanding. Farzadnia and Giles (2015: 18) do likewise. According to them, healthcare professionals have known for some time that "effective communication in healthcare requires patient and provider to willingly and positively cooperate in promoting a climate replete with shared meanings and understandings". They also make the point that, although things are now changing, this knowledge has been largely atheoretical, that is, not underpinned by any theorization on how best to promote "a climate replete with shared meanings and understandings". This certainly seems to be the case in narrative medicine and particularly in ISTUD-style narrative medicine. Marini and her team have for years shared, but not theorized, the view that, in times of physical and/or mental discomfort, people do not have what it takes to handle the technical language that only specialists are truly conversant with; they will spontaneously tend to use language that is direct, focused, natural, and closer to their own experience of nature's life cycle. Confronting patients with questions or with a narrative that is unnecessarily complex from a semantic point of view, and overly technical or technocratic, is therefore counterproductive. Yet, this is what medical practitioners who talk to their patients typically do: they tend to use a lot of medical jargon, often without realizing that what is obvious to them is anything but obvious to the people in front of them. ISTUD's narrative medicine researchers further believe that, when confronted with complex language, there is a real risk that patients will be forced into a different and difficult register that they might not master as well, and this could in turn jeopardize the accuracy of information conveyed. On the other hand, when confronted with simple, natural language, patients will feel less anxious, even reassured, "at home". They will use language they can handle with relative ease and convey a more accurate message. It is therefore in the interest of medical practitioners to follow suit, or rather to set the example, and to rely on simple language when communicating with patients or seeking to obtain information from them. Patients may not feel entirely reassured (depending on the seriousness of their condition), but at the same time, they are less likely to feel totally overwhelmed by their disease. Effective communication in times of mental and/or physical discomfort means communication using

simple language, followed by a trustful and open relationship. A language too hard to understand, far removed from the frailty of the person, could become the patient's worst enemy and have a serious impact on their chances of recovery (Cappuccio and Marini forthcoming).

The joint venture with Minimal English scholar and linguist Bert Peeters (the main author of this chapter) has made it clear to Maria Giulia Marini (the second author of this chapter) that the above line of thinking is entirely consistent with the basic tenets of what is known among communication theorists as Communication Accommodation Theory (Giles 2016). Farzadnia and Giles's (2015) review of the large body of practice and research that has relied on Communication Accommodation Theory for the study of the so-called patient-provider interaction[3] does not refer to narrative medicine, simply because narrative medicine does not refer to Communication Accommodation Theory. The insistence on the use of simple language for effective communication is something that will need to be theorized further in future work.

11.4 The Value of Structured Narratives

Structured narratives present an important advantage over their free-flowing counterparts: as patients are coached into developing their story according to preset criteria, writing about their experience, their thoughts, and their feelings in a predefined order, the accounts they produce are relatively easy to analyze and to compare. Researchers who use the material to gain a better idea of what patients go through know where to look for information about particular stages of the illness and/or the treatment and the healing process.

The narratives solicited from patients by ISTUD's narrative medicine research team unfold chronologically, moving diachronically from ancestral past to recent past, to present and beyond. As can be seen from Table 11.1, which provides the original list of headings in the Italian version of the storyline, as well as Marini's first attempt at an English translation, the idea has remained unchanged from the outset: the aim has always been to provide patients with a structured opportunity to talk, or rather write, about the commencement of symptoms, the treatment, and

Table 11.1 Italian and English headings in the original version of the storyline

Qualcosa è cambiato	Something has changed
Il viaggio nelle cure	The journey in care
Oggi	Today

whether they have got better or worse. In addition, there was an untitled section in the original version, prompting patients to explain whether and how writing about their condition has helped them cope with the situation they are in.

Each heading was followed by a series of prompts. No questions were asked; each prompt consisted of a few words, after which a dotted line invited patients to freely express themselves. Table 11.2 provides the original prompts, in Italian and in English, used under the first heading ("Qualcosa è cambiato / Something has changed").

Patients were given no explicit instructions: there was no obligation to write something on all dotted lines, and there was no expectation that patients would tell their story using the exact prompts provided. Among the stories returned over the years, there are several that either contain gaps (i.e. prompts that were not taken up) or replace prompts with comparable ones providing a better fit with the story a patient wanted to tell. It also happened that more information was provided than expected: some patients would add extra paragraphs on the back of the form or even on separate sheets. In addition, in recent years, the storyline has been made available on the internet (http://www.medicinanarrativa.eu), which provides patients with even more freedom to talk about the things they want to talk about and skip the others.

What follows is the English version of the bulk of a story provided to ISTUD's narrative medicine team by a female patient, aged 25, diagnosed with multiple sclerosis in 2008. The story was recorded in Italian in 2014, via the web interface. The English translation was checked against the original by the first author.

> I noticed that I could not see well with my left eye, everything seemed blurry, as if there was a fog, everyone told me that I probably had vision fatigue because of too many hours spent in books. I waited for a few days before going to the emergency room… From there I was admitted for 15 days to the neurology department for further assessment and to treat

Table 11.2 Prompts following the first heading in the original version of the storyline

Ero …… quando ho iniziato a non stare bene …… e mi succedeva di ……	I was …… when I started to feel not well …… and it happened that ……
Allora per capire cosa stesse succedendo decisi di rivolgermi a ……	So to understand what was going on I decided to go to ……
Alla fine gli esperti mi dissero che ……	At the end the experts told me that ……
Nel momento in cui mi comunicarono la malattia io provai sensazioni di …… e pensai che …… e decisi di ……	The moment they told me about the disease I felt …… and I thought that …… and decided to ……
In casa mi capitava di ……	At home, it happened that ……..
Al lavoro mi capitava di ……	At work, it happened that ……...
Con i miei cari mi capitava di ……	With my loved ones I used to ……
Il mio corpo ……	My body ……

inflammation of the optic nerve with cortisone. Since 2005, every year at the same time, around February/March, I have had optic neuritis, always treated just with cortisone at the day hospital of the center for sclerosis. I kept asking if I had that disease, but nobody would confirm it for me… Then, in 2008, I changed hospitals, doctors, and therapies, and finally got the diagnosis.

The moment they told me I had MS I felt I was dying… I didn't know well what this disease was, so I started looking on the internet… at 17 years

of age, every road seemed the right one to get information… I wanted to know at all costs what I'd have to go through.

I decided to look for news everywhere, read blogs, encyclopaedias, and whatever else. I was angry with everyone… no one understood how I felt… I hated my family because, until that point, they hadn't told me anything. I felt alone in something much bigger than me.

In the days immediately after, always with anger in my heart, I pretended to feel good, and that the whole thing did not touch me in the slightest and instead, every night, I was alone in my bed crying.

I was angry with the others, with my close family in particular, and as for my friends, I didn't ever tell them anything… I felt different… a loser… who would no longer be able to have as much fun as them.

Others around me were silent… nobody said anything, never any word of comfort, any help, any explanation. I felt ignored by the doctors because they wanted to talk to my mother and not to me… she always had to be present, even after I turned 18… and that was something I just could not stand… it was like retaliation: she, at first, hadn't informed me of anything, now I did not want to inform her of anything myself. […]

I did not know what would become of my life, my relationships, my future… I was afraid of no longer managing to study and of not being able to find work.

MS for me was a sentence, a punishment I did not understand.

I passed up a thousand evenings with friends, I passed up high school trips and holidays because of the therapy. At age 18/19, my life was organized around therapy and assessment.

My achievements have been numerous… I enrolled in a law degree, I continued to study, I had a few minor jobs, I met many people, I found new friends that I could talk to about my illness, and that were always ready to encourage me and help me when I'm tired, and I continued to go for a swim at least twice a week.

I talk about sclerosis only with those who can give advice or suggestions and understand my mood and my difficulties.

My family talks very little about it and, when they do, they talk about "that disease of yours"… in short, it is the great Nameless Thing. […]

MS, for me, is a fixed idea… every day I wonder if the therapy is working, if I can continue it for life, if and when I have other relapses… it is a never-ending source of questions I'm not always able to answer.

My everyday life is fairly quiet… when I study, my concentration is not always at its best, when I do some work at home or in the garden, I have to

stop because I'm tired… but, after all, everybody is entitled to a break sometimes…

I think the support I have received during my journey has been full of obstacles…

self-injection therapy made me feel sick, the intravenous one seemed to work well, but because of the risks involved it has been suspended until the arrival of oral therapy, about which I was not told much… and as always I've had to search on the web… […]

I'm not thinking about tomorrow… I live one day at a time.

11.5 The Story of an Emerging Collaboration: Minimal English and Narrative Medicine

The cross-disciplinary dialogue between narrative medicine, on the one hand, and the Natural Semantic Metalanguage (NSM) approach in linguistics, on the other hand, got underway in May 2016, when Maria Giulia Marini established contact with Anna Wierzbicka. Several decades earlier, the latter had sown the seeds of what would eventually, under the impetus of Cliff Goddard, her closest associate, be referred to as the NSM approach, and some of that work had come to Marini's attention as she set out to make improvements to the existing English version of ISTUD's narrative medicine storyline, shortly after publishing her own book on narrative medicine (Marini 2016). The need for a correctly phrased English version was becoming particularly pressing in view of the ongoing dissemination of results from narrative medicine research and practice at international conferences, where English is the default language for proceedings. ISTUD-style narrative medicine was flourishing—but only locally—and the research team was keen to further promote its findings in the international scholarly community. In addition, there was the issue of the ever-increasing number of non-Italian-speaking refugees arriving on Italian shores, and elsewhere in Europe, via the Mediterranean. These refugees are not always in the best state of health; they are medically screened upon arrival and often have a story to tell. However, they cannot tell their story in Italian, as they don't speak the language.

It is in the process of making improvements to the English translation of ISTUD's narrative medicine storyline that Marini realized how much she and her team, when drafting the original version, had actually—but unwittingly—relied on NSM semantic primes (such as I, BODY, MOMENT, FEEL, HAPPEN, THINK, WANT, and NOT in the prompts in Table 11.2). Further reflection soon convinced her of the importance of using simple language, of the type used within the NSM approach. On the one hand, she realized that the use of unnecessarily complex language might cause unnecessary and entirely avoidable problems for patients from a variety of cultural backgrounds. She therefore wanted to make the storyline easier to understand for people whose English is rudimentary at best. On the other hand, as mentioned previously, she suspected that, in times of physical and/or mental discomfort, people will spontaneously tend to use simple language—including a greater number of semantic primes and molecules. Relying on prompts written in simple English in the hope of collecting data that are also expressed in relatively simple language therefore seemed like the way to go and is entirely in line with the assumptions of communication theorists working within the framework of Communication Accommodation Theory.

Given the scarcity of relevant publications, Marini was not aware of the recent work on Minimal English. However, it didn't take long for Wierzbicka to realize that it was the latter, rather than the Natural Semantic Metalanguage in its purest form, that would be more likely to play a potentially groundbreaking role within narrative medicine. Almost immediately, Wierzbicka brought the e-mail exchanges she had had with Marini to the attention of some of her colleagues, including Bert Peeters, one of the "old hands" (Goddard 2010: 460) in the NSM approach.[4] As a near-native speaker of French and a former student of Italian, the language in which ISTUD's NM storyline had initially been drafted before being translated into English, Peeters was thought to be in an excellent position to bring not only his long-standing familiarity with the NSM approach but also his exposure to other Romance languages (as most clearly evidenced in Peeters [2006]), to bear on what had all the hallmarks of an exciting new cross-disciplinary development.

A dialogue between Marini and Peeters was established, and a preliminary presentation of the basic tenets of narrative medicine and the potential of Minimal English for its ongoing development took place at an NSM workshop at the Australian National University in July 2016, roughly 2 months after the initial contacts between Marini and Wierzbicka. This presentation, by Peeters (with invaluable input from Marini) became the backbone for the present chapter. It sparked a lot of interest among workshop attendees and provided further encouragement for a collaboration that, by now, is well underway. It is by no means an exaggeration to say that innumerable e-mails and half a dozen or so Skype sessions, each extending well over 1 hour, have successfully overcome the tyranny of distance.

Marini and Peeters had little trouble finding common ground. They soon enough agreed that the way to go was to critically assess both the Italian and the English versions of the storyline, so as to bring them in line with the principles underlying Minimal English (and Minimal Italian). The original prompts were redistributed over six headings rather than three. The new headings appear in Table 11.3; the last column shows the English headings of the original storyline, for the sake of comparison.

The new headings consist of a mix of semantic primes and molecules. "Illness", in heading 1, is a word that could not possibly be avoided in a version of Minimal English compiled for the purposes of narrative medicine. The same is true for words such as "doctor", "nurse", and

Table 11.3 The new headings (Italian and English) compared with the original English ones

Prima della malattia	Before the illness	Something has changed
Poi mi successe qualcosa	Then something happened to me	
Le cose/alcune cose non erano più come prima	Things/some things were not like before	The journey in care
Adesso	Now	Today
Domani	Tomorrow	
Scrivendo la mia storia	Writing my story	

"specialist" (used in the revised prompts, under the third heading). Heading 2 avoids the verb "change" and uses the simple past. The correspondence between heading 3 and the very metaphorical "The journey in care" may seem to be far-fetched; however, the full version of the storyline in Appendix A shows that the prompts in this section are as much about reactions and fears following the diagnosis as they are about the diagnosis itself. The heading "Today" was replaced with "Now", as this section is not just about the day when the patient tells his or her story. Nevertheless, "Tomorrow" was chosen as the heading for the fifth part of the storyline, as we couldn't think of a convincing alternative. We had to avoid writing in stilted, clumsy, or unidiomatic English. A compromise between the rigors of NSM and the freedom of ordinary English had to be found.

Each section in the storyline was painstakingly rewritten, in both languages, with all possible precautions put in place to ensure that the distance between the original storyline and the improved versions would remain minimal. There was a simple rationale for this. Before Marini found out about NSM, and subsequently Minimal English, she and her team had already collected thousands of narratives, all in Italian, from patients suffering various medical conditions. For these narratives, many of which have already been subjected to analysis, the original storyline was used. To cast aside this wealth of data and start again from scratch was simply unimaginable. From the outset, the idea was to go on collecting and analyzing data, not only in Italian (the only language used so far for data collection) but also in other languages, starting with English, without having to give up on the work already done. In spite of the differences between the original and the revised storylines, the "old" and the "new" Italian data will be sufficiently compatible to be analyzed side by side, and comparison with emerging data from other languages will not be limited to newly collected material. In due course, the amount of new data will of course significantly increase, and it will be possible to focus more and more on data that are fully consistent.

Table 11.4 shows, side by side, the original English version of the material under the fourth heading ("Now"). Although the differences are

Table 11.4 A partial comparison of the prompts before and after the rewrite in Minimal English

My body and my feelings ……	Now, I feel ……
	The illness ……
	My body ……
I feel I can do ……	I can do ……
I think that the care has been …… and in particular therapies were …….	Many / some people have done things for me; they have ……
	They haven't ……
	Now, the illness is …… / is not …… anymore.
When I'm at home I can / cannot ……	At home, I can …… / I cannot ……
With my loved ones ……	When I am not at home, I can …… / I cannot ……
At work I can / cannot ……	
Away from home I can / cannot ……	Now, with the people in my life, ……
With friends ……	

significant, the general thrust is the same. The main difference is that the text has been simplified—and also made relevant for larger numbers of patients. References to "at work" have been avoided, since not all patients have a job away from home: some may be permanently disabled, or retired, or jobless. We also wanted to include an opportunity for patients

to talk/write about what they can and cannot do when, instead of being at home, they are in a shopping center, or on a holiday, and so on.

Space limits prevent us from presenting a detailed comparison between all sections of the original and the revised storyline. The full version of the new storyline (in Minimal Italian as well as in Minimal English) can be found at the end of this chapter, in Appendix A. It became the cornerstone for the pilot study described in the next section.

11.6 The Pilot Study: An Early Report

Following the review of the storyline, a pilot study was launched; its aim was to assess the translatability of the new version, to make further changes (if required), and to collect some newly written narratives originating in a number of countries. A letter, signed by the two authors of this chapter, was sent to medical researchers in ISTUD's narrative medicine network based elsewhere in Italy and also abroad in the UK, the USA, Australia, France, Germany, Portugal, and Israel. The text of the letter is reproduced in Appendix B.

At the time of writing (December 2016), expressions of interest had been received from France, Portugal, the USA, Australia, and the UK.[5] Silvia Rossi, Scientific Director of the association *Cancer Contribution* (Paris), and Susana Magalhaes, Professor of Medical Humanities at the Catholic University of Porto, had produced French and Portuguese versions of the storyline that were to be checked for accuracy before being used for data collection. It was expected that each research team would collect 10 to 15 written narratives, all to be carefully analyzed. David Tomasi, Inpatient Psychiatry Group Therapist at the Medical Centre of the University of Vermont (USA), undertook to use the Minimal English version of the storyline to collect narratives from psychiatric patients affected by major depressive disorders. The European teams agreed to focus on oncological patients writing in Italian, French, and Portuguese, respectively. A team of narrative medicine researchers in Australia indicated they would be using a slightly modified tool

targeting patients with colon cancer who had undergone an ostomy; the "Australian storyline" presents several commonalities with the one prepared in minimal English, but also some peculiarities related to living with the ostomy. Thus, apart from the USA, patients affected by major depression, all patients whose narratives were to be collected in the various countries involved in the pilot study, are cancer sufferers; patients in both categories live with a condition that represents a source of frailty best approached through simple and easy-to-understand language. It was hoped the results would be encouraging enough for work to proceed along the same or similar lines. Maria Giulia Marini was looking forward to reporting on progress at the 41st National Australian Association of Stomal Therapy Nurses (AASTN) Conference (Brisbane, 12–15 March 2017), at which she had been invited for a keynote address on the topic of storytelling in stomal therapy, and subsequently at an NSM workshop at the Australian National University.

The researchers participating in the pilot study are particularly keen to find out in what ways patient accounts in Italian differ from those in other languages. Different languages use different vocabularies, and most of the key terms patients use to talk about their condition are certain to lack universality. Unlike the prompts in the storyline, which can be controlled (i.e. written in Minimal Italian, Minimal English, etc.), the accounts provided by patients will always be language specific. To make patients' responses absolutely comparable, it will probably be necessary to develop a kind of semantic glossary containing definitions, in Minimal English, of highly relevant language-specific terms corresponding more or less (often less than more) to terms such as "illness/disease/nausea", "pain/ache(s)/suffering", "panic/distress/shock", "fear/apprehension/anxiety", and so on.

11.7 Conclusion and Outlook

As we have seen, medical language is technical: it belongs to a profession and has its own jargon, most commonly an English-based code largely made up of names of diseases, procedures, tests, and drugs that,

to use a medical metaphor, has gone viral—at least within the medical profession. Most of the articles published in peer-reviewed medical journals are written in this quasi-global scientific English that has as its major advantage that it allows doctors and medical scientists more generally to communicate with their peers across the world. But there are drawbacks as well.

One of them, worth mentioning although it is not immediately relevant in the present context, is the ever-growing concentration on procedures imposed by people who speak and write very good scientific English. Medical discoveries, new ideas, and results originating in countries where English is not the primary language of communication are often eclipsed by those originating in the English-speaking world; although they may well be of equal merit, the papers that report on them tend to be written up in poorer English, which makes them more likely to be rejected (Taylor 2011).

Another drawback is that current medical language, the only language (English-based or otherwise) that many health professionals command, is very disease-oriented and not focused on the patient; it is esoteric rather than exoteric and therefore tends to increase the gap between care providers and care seekers, as already argued a long time ago by Michel Foucault (1973). Behind every symptom, every illness, every diagnosis, there is a patient who is crying out to be heard, but is often unable to communicate effectively with health professionals, whose jargon they do not understand and whose ways of communicating create the impression that they, too, do not understand their patients. A disease may be so severe that the person suffering it loses hope and courage, harboring the darkest thoughts of resignation and despair instead. Being spoken to in terms that are at risk of making no sense to them, by specialists who focus on tests and test results rather than on the human beings in their care, may further exacerbate those negative feelings. It would seem obvious that anything that can be done to counteract this second drawback would have to be a step in the right direction.

One way of getting there is by integrating Minimal English into the medical humanities curriculum and by further promoting the latter

among medical students as well as through ongoing professional development for those already working in the medical sector. This would raise awareness among medical researchers and practitioners of the intrinsic merits of Minimal English and other similar tools based on other languages. The importance that Minimal English and (by extension) other "minimal languages" attach to simple words and phrases, that is, semantic primes and their combinations, such as *you* and *I*, *my body*, *now*, *before* and *after* (the latter providing a sense of past, present, and future), *feeling good* and *bad*, *knowing* and *thinking*, *maybe*, and so on, means such forms of communication could—and, given a chance, will—go a long way toward bringing the person behind the patient back into the picture.

The dialogue between ISTUD-style narrative medicine and Minimal English has only just started, but early indications are that a fruitful collaboration is well underway. We are hopeful that, in due course, the collaboration will involve, not just the joined authors of this paper, but also other colleagues in linguistics (the broader NSM and Minimal English community of scholars, represented on most continents) and in medicine (the broader narrative medicine community, expanding well beyond the Fondazione ISTUD in Milan). While linguists have for decades shown a keen interest in the oral and written discourse that takes place between medical specialists (doctors, surgeons, nurses) and patients, the interest shown by medical practitioners for the work done by linguists has been less pronounced. The medical humanities, a broadly defined and relatively new area of research of which narrative medicine is an integral part, are set to play a pivotal role in building more and stronger bridges between medicine and linguistics, for the common good of both.

Acknowledgments Maria Giulia Marini would like to acknowledge the support received from her fellow researchers at the Fondazione ISTUD: Paola Chesi, Valeria Gatti, Luigi Reale, Antonietta Cappuccio, and Tommaso Limonta.

Appendix A: The New Narrative Medicine Storyline, Written in Minimal Italian/English

La mia storia / My story

- Prima della malattia // Before the illness

Ero…	I was…

- Poi mi successe qualcosa // Then something happened to me

Successe così: Ero …… quando sentii qualcosa di ……... Mi sentii …… Allora, per sapere cosa stesse succedendo, parlai a …… Dopo qualche / molto / poco tempo, mi dissero che …… Mi sentii …… perché …… Il mio corpo …… Pensai che …… Volevo ……; perciò …… A casa …… Quando non ero a casa …… Le persone nella mia vita ……..	It happened like this: I was …… when I felt something …… I felt …… Then, to know what was happening, I spoke to …… After some / a long / a short time, they said to me that …… I felt …… because …… My body …… I thought that …… I wanted ……; because of this, …… At home …… When I was not at home …… The people in my life ……

- Dopo, le cose / alcune cose non erano più come prima // After that, things / some things were not like before

Nel luogo dove mi avevano detto cosa mi era successo, ……	In the place where they first told me what had happened to me, ……
Con la persona / le persone che mi aveva(no) parlato, mi sentivo ……	With the person / the people who had spoken to me, I felt ……
Il medico / L'infermiere / Lo specialista ……	The doctor / The nurse / The specialist ……
Volevo / Non volevo parlare ad altri specialisti perché ……	I wanted / I didn't want to speak to other specialists because ……
La malattia era ……	The illness was ……
In casa, parlavo a …… perché ……	At home, I spoke to …… because ……
Quando non ero a casa ……	When I was not at home ……
Le persone nella mia vita ……	The people in my life ……
Perciò, mi sentivo ……	Because of this, I felt ……
Le cose erano ……	Things were ……

- Adesso // Now

Adesso, mi sento ……	Now, I feel ……
La malattia ……	The illness ……
Il mio corpo ……	My body ……
Posso fare ……	I can do ……
Molte / alcune persone hanno fatto cose per me;	Many / some people have done things for me;

hanno ……	they have ……
Non hanno ……	They haven't ……
Adesso, la malattia è …… / non è più ……	Now, the illness is …… / is not …… anymore.
A casa, posso …… / non posso ……	At home, I can …… / I cannot ……
Quando non sono a casa, posso …… / non posso ……	When I am not at home, I can …… / I cannot ……
Adesso, con le persone nella mia vita, ……	Now, with the people in my life, ……

- Domani // Tomorrow

Quando penso a domani, ……	When I think about tomorrow, ……
Voglio ……	I want ……

- Scrivendo la mia storia // Writing my story

Quando ho scritto la mia storia, mi sono sentito ……	When I wrote my story, I felt ……

Appendix B: Text of the Letter Sent to Narrative Medicine Scholars, Inviting Them to Take Part in the Pilot Study

Dear X,

Since May 2016, a team effort involving Bert Peeters, honorary associate professor in the School of Literature, Languages and Linguistics at the Australian National University in Canberra and adjunct associate professor in the School of Humanities, Languages and Social Science at Griffith University, Brisbane, on the one hand, and Maria Giulia Marini, professor of narrative medicine at the Fondazione ISTUD and at Hunimed University, Milan, on the other hand, has been underway aimed at evaluating the benefits of using the Natural Semantic Metalanguage (NSM) in narrative medicine.

NSM is based on a lexicon of semantic primes, that is, simple concepts or building blocks that can be used for analysis of complex concepts, which are broken down into simpler concepts via reductive paraphrase. Research in the NSM approach deals extensively with language and culture. The declared NSM primes have stabilized as a list of irreducible meanings, typically coded as English words with specific senses, but expressible also in any other language. Indeed, the primes are hypothesized to be language universals, with most of them having been tested across a wide variety of languages without encountering disconfirmation. Each prime has its own universal combinatorial properties, which guarantee that any allowable sequence of semantic primes can be translated into any other language.

In narrative medicine, there are many possibilities to collect patients' narratives: it can be a free practice with no given script, or it can be according to a more structured process, known as an illness script. The story could be written according to a linear time development which follows the occurrence of a particular illness: before the illness, the falling ill phase, the being ill phase, and the getting better or getting worse phase. With this plot, given some micro-prompts, narratives can be told and written by patients and caregivers.At the Fondazione ISTUD, a linear script is used that tries to follow this concept of "memory" of the illness, together with an evaluation of the present situation.

Looking at previous versions of the script, it turned out that some of the micro-prompts corresponded to NSM sequences of semantic primes. This was the starting point of the collaborative process between the Fondazione ISTUD and the Australian National University in Canberra and Griffith University in Brisbane, referred to above. Bert Peeters and Maria Giulia Marini have been working out an illness script written in the so-called minimal English, which is a by-product of the Natural Semantic Metalanguage, transformed from a purely linguistic tool into a tool with concrete applications (such as narrative medicine) in mind.

Our aim was fourfold:

- Make it possible for the illness script to be translated into other languages without too much distortion.
- Make the script easier to understand for patients from a variety of cultural backgrounds.
- Through the use of simple language (Minimal English), get patients to tell their story using relatively simple language as well—the idea here is to apply findings coming out of the field of social psychology, particularly accommodation theory.
- Verify the hypothesis that, when an illness occurs and times get rough, patients may fall back on a greater number of semantic primes in their discourse, since the primes are more natural, less artificial, and universally embedded in humankind.

The draft script is now ready and we would like to test it in a number of languages for which there are stable NSM versions, as well as in our network: Italy, the UK, Australia, France, Portugal, Germany, and Israel.

The test would involve the collection, either verbally or in a written fashion, of a number of narratives (at least ten) from each country. The aim is to ascertain whether the effort of harmonization of illness scripts across languages is worthwhile.

We are strongly committed, together with Prof. Anna Wierzbicka (ANU) and Prof. Cliff Goddard (Griffith University), the main promoters of the NSM approach, to developing a universal illness script, respectful of contextual differences, which can be a vehicle for transferring knowledge on a worldwide base.

English and Italian versions of the draft script are attached for your feedback. Your opinion about this new field of investigation, resulting from the application of the Natural Semantic Metalanguage approach to the field of narrative medicine, matters a lot to us, and we would really like to know your thoughts.

As far as testing the script is concerned, please let us know whether you wish to join us in this pilot study. We sincerely hope you will be interested in our joint venture and look forward to hearing back from you at your earliest convenience.

With all best wishes,

Bert Peeters Maria Giulia Marini

PS—For more information on the Natural Semantic Metalanguage (NSM) approach, see https://www.griffith.edu.au/humanities-languages/school-humanities-languages-social-science/research/natural-semantic-metalanguage-homepage [short URL: http://bit.ly/1XUoRRV]

Notes

1. According to Hurwitz and Dakin, the term was first used in the 1940s and only took hold in the 1970s.
2. http://www.theintima.org/. The "Mission and Vision" statement can be found at http://www.theintima.org/missionandvison/ (last accessed 28 November 2016). Two issues are published every year. The fall 2016 issue contains 48 pieces chosen by the editors out of no less than 242 submissions received.
3. The authors use the term *provider* "to embrace a wide range of healthcare professionals (e.g., specialists, physicians, nurses, medical students, and the like)".
4. Peeters is the author of several NSM-inspired chapters and papers and the founder of a framework, known as applied ethnolinguistics, aimed at providing advanced foreign language learners with the tools necessary to explore the cultural values of a language-culture through the foreign language itself (cf. Peeters 2013, 2015a, b).
5. Narrative medicine researchers in the UK reacted positively to the call for expressions of interest, but made no undertaking to put the new tool to the test and use it for data collection. German researchers declined to participate.

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[1]Note: Page numbers followed by "n" refers to notes.

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